

What Animal Health Tells Us About Human Health

I'm constantly doing research. In addition to traveling and translating medical studies, I receive dozens of obscure health publications every month from around the world. My filing system consists of stacks of studies and papers, which eventually tend to collapse under their own weight.



Dr. David Williams
Every few months, I have to purge my office so I'm not buried in an avalanche of newsletters, journals, books, and magazines. During one of my most recent purges, I began to notice a pattern: Many of the publications I follow cover bodybuilding and animal husbandry. Studying those fields of interest may seem like a waste of time for someone focused on natural health, but that's definitely not the case. Very often, it's from these fields of endeavor that you'll find some of the most cutting-edge research on health and nutrition.

Bodybuilders Push the Envelope

Without having to deal with the constraints imposed on conventional medical research, bodybuilders

for decades have pushed the envelope to see how far they can test the human body. Their methods are not always legal or safe. And the results of their experimentation don't always end well.

The abuse of anabolic steroids, growth hormone, insulin, and diuretics among professional bodybuilders has led to a surprising number of deaths and disabilities from conditions such as heart disease and kidney failure. You'd be lucky to find a dozen healthy competitors from the 1990 International Federation of Bodybuilders. Some never made it to their mid-30s, and hardly any have been able to reach 50 without experiencing some major health issue. (When a bodybuilder dies at an early age, we often hear the same story commonly told about wrestlers, NFL players, and other athletes who have abused steroids: "They had a preexisting condition and would have experienced the same problem regardless of their occupation.")

This is not to say that bodybuilding only sets a bad example. Far from it. In fact, we've learned a tremendous amount of information about the effects of various diets, supplements, herbs, and forms of exercise on our muscular, cardiovascular, hormone, and immune systems. Just one

example involves the amino acid compound called creatine.

Benefits of Creatine

Bodybuilders started using creatine in the 1990s because it enlarged muscle tissue by drawing more water into the tissue. Beyond pumping up muscle volume, it actually had many other proven health benefits that I wrote about at the time. However, even though it's one of the most-studied sports supplements, at the end of the '90s, news reports erroneously stated that creatine caused muscle damage. Later reports, also found to be false, claimed creatine might be carcinogenic.

The truth is, creatine can help prevent and, in many cases, slow the progression of a long list of muscular and neurological conditions like amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease), multiple sclerosis, and Alzheimer's, Parkinson's, and Huntington's diseases.

When combined with exercise, creatine also helps increase lean muscle mass. Even more amazing, it helps protect the brain in the event of a stroke. With the high incidence of stroke in our society, I don't know why the public isn't being told to take creatine every day for stroke prevention,

much like aspirin is used to protect against second heart attacks.

If you're at risk for stroke, I strongly suggest buying creatine monohydrate in bulk powder and taking a 5 mg scoop every day. (I personally don't have any of the risk factors for stroke, but I religiously add creatine to my morning protein shake. When purchased in bulk, it costs around 8 cents a day.)

In addition, creatine has been shown to improve memory, particularly in the elderly. It also works in conjunction with other amino acids to increase nitric oxide levels in the body. Nitric oxide reduces blood platelet "stickiness" and improves overall circulation. (By the way, erectile dysfunction medications also work by increasing nitric oxide levels. Along with creatine, one of the best ways to boost nitric oxide is through the use of the amino acid L-arginine.)

Animal Husbandry

While the contributions from bodybuilding research are enormous, they're a drop in the bucket compared to what we have learned from animal husbandry.

Livestock and animal husbandry has been a part of my life since an early age. I was raised and worked in cattle and farming communities until I was out of high school. Even now, I ranch and raise cattle, goats,

sheep, chickens, llamas, and an assortment of dogs and cats. Both here and in Australia, I have been involved extensively in the horse racing and breeding industry.

(If you're interested, I recently posted a video on my Facebook page of a baby llama that was born on the ranch. The kids just happened to arrive minutes after it was born and were able to witness some of its first awkward steps. Go to facebook.com/DrDavidWilliams to see it.)

When raising livestock, you quickly learn that the animal's weight is one of the most crucial factors when it comes to profits or losses and your ability to stay in business. Animals are bought and sold by weight. Animals that require a lot of food to gain weight are culled, along with those that don't mother well, are infertile, or don't produce healthy offspring. And with the prohibitive cost of veterinary bills, if you expect to survive in the business and make any money, you have to learn how to prevent and cure diseases in animals through nutrition.

Animals can't rely on their Blue Cross/Blue Shield policy or Medicare for a major health crisis. They don't get subsidies for drugs or have the option of taking "preventive" drugs for life. They don't have the luxury of going

from doctor to doctor for a second opinion or to choose a therapy.

Time, and especially money, are deciding factors on how or if animals even get treated. This is why veterinary schools teach more about cellular health and nutrition than any of our medical schools. And it's the reason good veterinarians are some of the best diagnosticians around. Not only are they unable to ask questions of their patients, they often have to save their patients' lives using the most cost-effective means available.

Veterinarians and those in the livestock business understand that proper nutrition isn't optional, it's essential. The best diet produces the healthiest animals. No animal (or human for that matter) can live up to its genetic potential on a poor diet. In those that are blessed with the best genes and die early of natural causes, it is usually due to a nutritional deficiency.

Unfortunately, most doctors today don't look for nutritional deficiencies or even believe they exist. (How many times are we told, "We get all the vitamins and minerals we need from our food, and vitamin supplements only make for expensive urine?") And we've been conditioned to believe that people don't die of nutritional deficiencies.

However, to discover the underlying causes of some of today's

Alternatives. Author: Dr. David Williams; Editor: Larissa Long

ISSN# 0893-5025. Published monthly for \$69.99/yr. by Mountain Home Publishing at 6710-A Rockledge Dr. Ste. 500, Bethesda, MD 20817. Editorial Office: 6710-A Rockledge Dr. Ste. 500, Bethesda, MD 20817. Periodicals postage paid at Bethesda, MD and at additional mailing offices.

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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.

most common ailments, all we have to do is look at the early studies on nutritional deficiencies in livestock. Obviously, some of these problems may have other contributing factors, but the research has proven specific nutritional deficiencies have a direct cause and effect. If you take action on a couple of the areas I'm going to mention in this issue, you can save yourself a tremendous amount of suffering and heartache.

Ulcers and Acid Reflux

Proton pump inhibitors (PPIs) are now among the highest-selling classes of drugs in the US, with yearly sales of \$10 billion. Drugs in this class (Prilosec, Zegerid, Prevacid, Protonix, Aciphex, Nexium, Dexilant, etc.) are available in prescription and over-the-counter options.

These medications inhibit the production of stomach acid, and for this reason they have been a form of treatment for ulcers. As they became more readily available, however, doctors and the public alike flocked to these medications to treat heartburn, indigestion, and acid reflux/gastroesophageal reflux disease (GERD). But

just because the FDA has approved them for over-the-counter sales doesn't mean they don't have their share of known side effects.

PPIs have been linked to increased gastrointestinal infections including *Clostridium difficile*-associated diarrhea, pneumonia, hip fractures (a 44 percent increased risk), nutritional deficiencies, and the breakdown of antiplatelet agents. (*Therap Adv Gastroenterol* 2012 Jul;5(4):219–32)

These days, PPIs are given along with antibiotics to treat ulcers. In the early 1980s, Australian researchers discovered a connection between the bacterium *Helicobacter pylori* and stomach ulcers in humans. That's roughly when the idea of using antibiotics to treat stomach ulcers in humans started to gain traction. By the mid-1990s, antibiotics used in conjunction with PPIs were considered to be the cure for ulcers.

I'm not sure why it took conventional medicine so long to come to this conclusion. Veterinarians had figured this out at least 70 years earlier.

In the book *Swine Practice*, Dr. A.T. Kinsley wrote that peptic

ulcers could be cured with a combination of 1 percent silver nitrate (a natural antibiotic) and the trace mineral bismuth. (This book was published in 1921 before the advent of pharmaceutical antibiotics. Silver nitrate was popular during that time period, but it can be toxic when taken internally and should only be used topically. Other natural antibiotics include propolis, Manuka honey, garlic, and colloidal silver, all of which have been used traditionally to cure ulcers.)

Veterinarians have been using a combination of bismuth and natural antibiotics to successfully cure ulcers for decades, long before PPIs and antibiotic drugs were ever developed.

Bismuth is the main ingredient in Pepto Bismol. A teaspoon of Pepto Bismol in combination with one of the antibiotic substances I mentioned will very often take care of an ulcer. (*World J Gastroenterol* 2008 Dec;14(48):7361–70)

Some of the vets I know use a combination of Pepto Bismol or powdered bismuth and Manna Pro Aureomycin Medicated Crumbles. As you likely know, Pepto Bismol can be found everywhere, including your local dollar store, and a

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (As required under Act of August 12, 1970: Section 3685, Title 39, United States Code). 1. Publication Title: *Alternatives*. 2. Publication no.: 0893-5025. 3. Filing Date: October 2016. 4. Issue Frequency: Monthly. 5. No. of Issues Published Annually: 12. 6. Annual Subscription Price: \$69.99. 7. Complete Mailing Address of Known Office of Publication: Healthy Directions, 6710-A Rockledge Drive, Suite 500, Bethesda, MD 20817. Contact Person: Jennifer Collier. Telephone: (240) 744-7930. 8. Location of the Headquarters or General Business Office of Publishers: Healthy Directions, 6710-A Rockledge Drive, Suite 500, Bethesda, MD 20817. 9. Names and Addresses of Publisher, Editor and Managing Editor: Publisher: Matthew Kinnahan, Healthy Directions, 6710-A Rockledge Drive, Suite 500, Bethesda, MD 20817. Editor: Dr. David G. Williams, 6710-A Rockledge Drive, Suite 500, Bethesda, MD 20817. Managing Editor: Larissa Long, 6710-A Rockledge Drive, Suite 500, Bethesda, MD 20817. 10. Owner (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1% or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given.) Healthy Directions, 6710-A Rockledge Drive, Suite 500, Bethesda, MD 20817; Helen of Troy L.P., One Helen of Troy Plaza, El Paso, TX 79912. 11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1% or More of Total Amount of Bonds, Mortgages or Other Securities: None. 12. Not applicable. 13. Publication Title: *Alternatives*. 14. Issue date for circulation data below: October 2016. 15. Extent and nature of circulation: a. Total no. copies printed (Net Press Run): Average No. Copies Each Issue During Preceding 12 Months: 41,136; No. Copies of Single Issue Published Nearest to Filing Date: 33,907. b. Paid Circulation (By Mail and Outside the Mail): (1) Mailed Outside-County Paid Subscriptions Stated on PS Form 3541 (Include paid distribution above nominal rate, advertiser's proof copies, and exchange copies): Average No. Copies Each Issue During Preceding 12 Months: 38,327; No. Copies of Single Issue Published Nearest to Filing Date: 31,480. (2) Mailed In-County Paid Subscriptions Stated on PS Form 3541 (Include paid distribution above nominal rate, advertiser's proof copies, and exchange copies): Average No. Copies Each Issue During Preceding 12 Months: None; No. Copies of Single Issue Published Nearest to Filing Date: None. (3) Paid Distribution Outside the Mails Including Sales Through Dealers and Carriers, Street Vendors, Counter Sales and Other Paid Distribution Outside USPS®: Average No. Copies Each Issue During Preceding 12 Months: 1,534; No. Copies of Single Issue Published Nearest to Filing Date: 1,364. (4) Paid Distribution by Other Classes of Mail Through the USPS (e.g. First-class Mail®): Average No. Copies Each Issue During Preceding 12 Months: 66; No. Copies of Single Issue Published Nearest to Filing Date: 65. c. Total Paid Distribution [sum of 15b. (1), (2), (3) and (4)]: Average No. Copies Each Issue During Preceding 12 Months: 39,927; No. Copies of Single Issue Published Nearest to Filing Date: 32,909. d. Free or Nominal Rate Distribution outside the Mail (Carriers or other means): (1) Free or Nominal Rate Outside-County Copies Included on PS Form 3541: Average No. Copies Each Issue During Preceding 12 Months: 21; No. Copies of Single Issue Published Nearest to Filing Date: 19. (2) Free or Nominal Rate In-County Copies Included on PS Form 3541: Average No. Copies Each Issue During Preceding 12 Months: None; No. Copies of Single Issue Published Nearest to Filing Date: None. (3) Free or Nominal Rate Copies Mailed at Other Classes Through the USPS (e.g. First-class Mail®): Average No. Copies Each Issue During Preceding 12 Months: 68; No. Copies of Single Issue Published Nearest to Filing Date: 63. (4) Free or Nominal Rate Distribution Outside the Mail (Carriers or Other Means): Average No. Copies Each Issue During Preceding 12 Months: 105; No. Copies of Single Issue Published Nearest to Filing Date: 105. e. Total Free or Nominal Rate Distribution [sum of 15. (1), (2), (3), and (4)]: Average No. Copies Each Issue During Preceding 12 Months: 194; No. Copies of Single Issue Published Nearest to Filing Date: 187. f. Total distribution (sum of 15c and 15e): Average No. Copies Each Issue During Preceding 12 Months: 40,122; No. Copies of Single Issue Published Nearest to Filing Date: 33,096. g. Copies Not Distributed: Average No. Copies Each Issue During Preceding 12 Months: 1,014; No. Copies of Single Issue Published Nearest to Filing Date: 811. h. Total (Sum of 15f and g): Average No. Copies Each Issue During Preceding 12 Months: 41,136; No. copies of single issue published nearest to filing date: 33,907. i. Percent Paid (15c/15f x 100): Average No. Copies Each Issue During Preceding 12 Months: 99.5%; No. Copies of Single Issue Published Nearest to Filing Date: 99.4%. 16. Publication of Statement of Ownership: November 2016. I certify that the statements made by me above are correct and complete. Jennifer Collier, September 16, 2016.

A “Fun” Way to Pass a Kidney Stone

Years ago a buddy of mine passed a kidney stone. He provided a play-by-play of the incident, so I know it was painful. He said, “It’s like giving birth to a porcupine.”

Maybe he was lucky in one sense. Kidney stones that are smaller than 4 millimeters usually pass down from the kidney into the bladder and out the urethra. If the stone is larger than 6 millimeters, though, the odds of it passing are only 1 percent. And when those stones get stuck, a trip to the emergency room is usually the result.

The channels in the kidney are like a river with dozens of tributaries leading into it. The twists and turns of these tributaries are different from person to person. I’m telling you this because recently, there was a report of a gentleman who passed three kidney stones after a single roller coaster ride—the Big Thunder Mountain Railroad at Disney World. Apparently, the combination of vibrations, sharp turns, and changing forces jostled the stones along the passageways of the kidney and out of the body.

Dr. David Wartinger actually developed a model kidney to test the effects that roller coasters have on passing kidney stones. He has also studied the effects of bungee jumping, snowmobiling, and dirt biking after reports that those activities led to the passing of stones. He has been researching this area since 2008 and has demonstrated that the jarring movements of these activities are an excellent way to help move kidney stones along. In fact, he recommends trying the roller coaster treatment “without hesitation” to all his patients with kidney stones. Unfortunately though, I doubt your insurance would pay for the ticket. (*J Am Osteopath Assoc* 2016 Oct 1;116(10):647–52) ■

5-lb bag of the medicated crumbles (enough to treat every animal on the ranch at least a dozen times) sells for less than \$7.

H. Pylori and Your Microbiome

While we’re on the topic of *H. pylori* and ulcers, there are a few facts that rarely get mentioned. It is estimated that at least 50 percent of the world’s population is infected with *H. pylori*. However, only 20 percent of those infected exhibit any related problems. The prevalence of *H. pylori* correlates more with socioeconomic status than race. The highest rates of infection are in developing countries, and immigration from these areas is

responsible for a higher prevalence in many Western countries.

It appears that, as long as you have a good overall balance of bacterial flora in your gut, *H. pylori* doesn’t pose a problem. In fact, it is the variety of bacteria in our body that helps us remain healthy and disease free. Some forms of bacteria that we might consider to be harmful may actually perform beneficial functions, and this appears to be the case with *H. pylori*. The interplay and complexity of the bacterial ecosystem in our gut is something we are just beginning to understand.

As a side, it wouldn’t be far-fetched to believe that the

widespread use of both antibiotics and PPI medication is contributing to our obesity epidemic either. Researchers recently reviewed the data of 49 *H. pylori* studies from 10 European countries, Japan, the US, and Australia. All of the evidence showed that patients treated for *H. pylori* infections developed significant weight gain compared to those who were left untreated. The researchers wrote, “Obesity and overweight were inversely and significantly correlated with the prevalence of *H. pylori* infection.” They continued, “The gradual decrease of the *H. pylori* colonization observed in recent decades could be causally related to the obesity endemic observed in the Western World.” (*Aliment Pharmacol Ther* 2014 Jul;40(1):24–31)

Traditional systems of healing, including Ayurvedic medicine, understood the importance of balance and symbiosis. Western medicine is only now starting to grasp the importance of this concept. One of the reasons that only a small percentage of people with *H. pylori* experience problems is because that bacterium is kept in check by other species of bacteria, along with sufficient digestive enzymes. This balance becomes skewed with antibiotics and PPIs, as well as excessive grains and insufficient raw foods in the diet, and the lack of beneficial bacteria gained from eating fermented foods. As I said 25 years ago and I continue to reiterate today, the key to solving health problems lies in restoring the beneficial bacteria in your gut. Fermented foods (which are naturally rich in beneficial bacteria), oral probiotics, and

intestinal probiotics are essential for maintaining health.

Cancer

Gut bacteria have also been gaining traction in the area of cancer prevention. Just last year, researchers at the University of Chicago found that giving mice *Bifidobacterium*, which normally resides in the gut, was as effective as immunotherapy in controlling the growth of skin cancer. And when the two treatments were combined, tumor growth was eliminated. Other studies have shown that adding certain naturally occurring bacteria species to cancer therapies actually activated an immune response from the body that didn't occur in the absence of those microbes. (*Science* 2015 Nov 27;350(6264):1084–9) (*Science* 2015 Nov 27;350(6264):1079–84) (*Nat Rev Immunol* 2016 Jan;16(1):5)

In a nutshell, researchers are realizing that microbes in your gut control your body's reaction to cancer. And it's not just cancers that appear in the gut, but anywhere in the body. The link between cancer and your microbiome is the immune system. Microbes in your gut can dial up or tone down inflammation and modulate the activity of immune cells and their reaction to cancer cells.

Top researchers and immunologists in major pharmaceutical companies around the world are shifting their research efforts to focus on the human microbiome. They feel that the addition of certain species of bacteria to their cancer immunotherapies will open up more effective ways to treat cancer. I have no doubt they are right and it would be a blessing to be able to

more effectively treat and hopefully eradicate cancer. The potential is there, but their research has only scratched the surface.

One of the difficulties they're running into is just how complicated the human microbiome actually is. We're talking about a universe of over 100 trillion "good" and "bad" bacteria, viruses, and fungi that live in and on the human body in totally different environments. They are also finding that trying to change the microbiome long term isn't that easy. If you're a long-time *Alternatives* reader, you already understand this.

In addition, researchers have now shown just how detrimental the overuse of antibiotics can be to the microbiome. One round of antibiotics can disrupt the balance of bacterial flora in the body for up to a year. Even worse, it seems like either no one wants to talk about it or they haven't connected the dots, but researchers have actually used antibiotics to increase the formation of tumors in mice. In other words, mice that are given antibiotics to alter their normal gut bacteria end up developing inflammation and cancerous tumors.

Researchers recently gave a subset of mice antibiotics before administering a carcinogenic agent. They compared those mice to a group that was given only the carcinogenic agent and no antibiotics. The mice that did not receive the antibiotics had significantly fewer and smaller tumors than those whose microbiome was disrupted with antibiotics. And sterile mice that received fecal transplants from mice already bearing malignancies developed the most tumors of all. (*MBio* 2015 Nov

10;6(6):e01693-15) (*MBio* 2013 Nov 5;4(6):e00692-13)

One other study with mice illustrated just how significant a role bacterial flora in the bowel can play when it comes to cancer.

Mice were inoculated with sarcoma tumor cells. Some of the mice were orally given milk or soy milk kefir and compared to mice that did not get kefir. At 30 days, oral administration of milk and soy kefir resulted in 64.8 percent and 70.9 percent inhibition of tumor growth, respectively, compared to controls.

Additionally, levels of immunoglobulin A (an antibody that plays a role in immune function) in the small intestine walls of the kefir-fed mice were significantly higher than the controls. The researchers concluded that kefir is one of the more promising foods for cancer prevention and the enhancement of infection resistance in the gastrointestinal tract.

If you haven't tried kefir, I suggest you do. Along with its antimutagenic and anticarcinogenic properties, other benefits include reducing lactose intolerance symptoms, stimulating the immune system, and lowering cholesterol.

On the human front, a team of researchers at the University of Michigan recently analyzed stool samples from 90 individuals—some with colon cancer, some with precancerous adenomas, and others with no disease. They found that the feces of people with cancer had an altered composition of bacteria, with an excess of the common mouth microbes *Fusobacterium* or *Porphyromonas*. A study shortly

thereafter analyzed stool samples from 156 individuals, some with colorectal cancer, some without. From the results, the researchers could predict the presence or absence of cancer with the same accuracy as any blood test. (*Cancer Prev Res* 2014 Nov;7(11):1112–21) (*Mol Syst Biol* 2014 Nov 28;10:766)

These studies tell us two very important things.

First, antibiotics should only be used when absolutely necessary. (I would also suspect that there are dozens of other drugs that disrupt our microbiome, but it will be years before anyone gets around to testing this.) And it's not just antibiotic drugs we need to be worried about. Much of our food supply contains a wide variety of antimicrobial compounds to increase shelf life and stability. When ingested, these compounds have the potential to destroy beneficial bacterial throughout the entire gastrointestinal tract.

Second, if you noticed in the study mentioned above, the bacterial species discovered in the colorectal cancer patients were actually *detrimental forms found in the mouth*. Practicing proper oral hygiene and taking a probiotic formulated with the beneficial bacteria found in the oral cavity are two very simple and straightforward things you can do to prevent cancer. Pathogenic oral bacteria have also been directly linked to heart disease.

For the longest time, most experts thought that these types of bacteria couldn't survive the acidic trip through the stomach to reach the lower intestines. That may not be the case. And we know harmful forms of bacteria enter

the bloodstream via the the mouth when there's inflammation and bleeding indicative of periodontal disease.

The pharmaceutical companies and most researchers are looking for that "one magic microbe" or simple combination of microbes that can be isolated, purified, and sold as a drug. They fail to understand that, when it comes to the microbiome, the benefits we experience are a function of the entire community and not a single bacterium.

Western medicine has continued to overlook the synergy that exists in the human body. Everything that happens in one area affects the whole system. We can force a change with drugs, but unless you keep taking the drug, the change is temporary. And these forced changes cause other parts of the body to make changes to adapt (referred to as side effects).

I fully understand the need for certain drugs and conventional therapies. Sometimes the body's defenses get overwhelmed and it might take temporary and drastic changes with drugs to survive. But from a prevention standpoint, we need to look at the overall picture. More and more cancer studies are proving that the gut microbiome controls our health.

Make sure you're replenishing and encouraging a balance of organisms every day. Is your doctor telling you that to prevent cancer or greatly improve the odds of successful cancer therapy, you need to load up on fermented foods

and take your probiotics? He/she should be.

New Age Pica

Pica is a type of eating disorder often found in livestock, especially cattle. It is characterized by persistent cravings and consumption of nonfood items. It primarily occurs when there's a deficiency of bulk fiber or certain minerals in the diet. (Anemia, which is caused by an iron deficiency, can also trigger pica.)

Animals with pica start eating things like dirt, clay, paint chips, wire, bones, plastic, rocks, paper, wooden fences, and even feces. As you'd suspect, pica can lead to serious health problems like bowel obstruction, poisoning, parasites, and other issues.

Pica isn't uncommon in cattle, horses, and dogs. Last year, we had a heifer that was apparently craving rubber and plastic items. She chewed up the cables on the welder, rubber feed buckets, plastic plant containers, and even the protective padding on the kids' trampoline before we got her situation under control with some mineral blocks.

In early medical literature, pica was also a fairly common diagnosis among humans, particularly in children and pregnant women. Although pica diagnoses are rare these days, it certainly can't be because we've eliminated all mineral deficiencies. I suspect it's because the most common cravings we see these days are for "acceptable" items. We'd recognize pica more often if we reclassified about half of the so-called foods in our grocery

stores as nonfood items, since they have no nutritional value.

Taking note of specific food cravings will often provide a general idea of what minerals may be lacking in your diet. It's not an exact science, but decades of observation have routinely led to very similar conclusions. (Keep in mind, however, that certain foods can trigger the release of chemicals in the brain, like opioids, which in turn can provide feelings of euphoria. This can be another reason for food cravings.)

Here are a few of the more common cravings and their associated deficiencies.

- **Cravings for chocolate and/or acidic foods** are typically associated with a lack of magnesium. Low magnesium is a major contributor to heart disease. It's no surprise that chocolate probably tops the list as one of the most craved foods in the world, and cardiovascular disease is the leading killer. Magnesium deficiencies are very common among the general population (up to 80 percent), but they go undetected for a couple of reasons. First, blood levels of magnesium are tested along with calcium, potassium, and sodium because only 1 percent of magnesium is in the blood. (A better test would be the red blood count magnesium test, which is rarely ordered.) And second, lab "normals" are set too low. Good sources of magnesium are nuts, seeds, fish, dark leafy greens, kelp, walnuts, and beans.
- **Cravings for sugary and burnt foods** are related to deficiencies in chromium, sulfur, phosphorus, carbon, and tryptophan (one of the brain's "feel good" chemicals). Turkey, beef, egg yolks, garlic, mushrooms, beer, cheese, fish, whole grains, and garlic are sources of

these minerals and compounds.

- **Refined carbohydrate cravings (bread and pasta)** often indicate a lack of nitrogen in the diet. Foods high in nitrogen also happen to be protein-rich foods like meat, poultry, seafood, and legumes. One of the best sources is sardines.
- **Cravings for fatty or oily foods** can indicate a lack of calcium. Milk, cheese, and vegetable greens are good sources of calcium.
- **Salt cravings** can indicate a need for chloride and/or silicon. Fish, nuts, and seeds are good sources, and beer is a decent silicon source.
- **Coffee or black tea cravings** can result from deficiencies in iron, salt, phosphorous, and sulfur. I've mentioned sources for all of these except for sulfur, which is in eggs, garlic, onions, meat, poultry, fish, and cruciferous vegetables.
- **Ice chewing as well as laundry starch and cigarette butt cravings** have all been associated with an iron deficiency. Sunflower seeds (my favorite), pumpkin seeds, nuts (particularly pistachios), beans, beef, liver, clams, mussels, and oysters are all good iron sources.

Look at Your Family History and Genetics

Take a good detailed look at your family history. It's something that's done on a daily basis when raising livestock. Cattle offspring routinely exhibit the same color patterns, size, and temperament as their parents. Not surprisingly, they also carry the same health flaws as their ancestors. You see the same thing in the pedigrees of dogs, race horses, and other show animals.

The same holds true with humans. If you've always been told that you take after your mother's side of the family, or that you're the spitting image of your Uncle

Bob, you probably have a similar genetic makeup as those relatives. And if Uncle Bob and the rest of the males on that side of the family suffer from heart disease, you might want to follow a diet and exercise program to help prevent that problem.

Genetics certainly play a role in our health and longevity, but many genes often require some sort of trigger to express themselves. You may have what is called a genetic variant that predisposes you to an autoimmune disease, like a food sensitivity. When you consume a certain type of protein, your immune system overreacts. Other triggers could be dander, pollen, molds, certain chemicals, or even physical injuries.

Genetics aside, I've traveled the world studying cultures where individuals tend to have longer life expectancies than other cultures. Although thousands of miles often separate these cultures, they seem to share a few common habits and practices, most of which we can try to incorporate into our own routines as well:

- **They're not exposed to pesticides, herbicides, or pollutants;**
- **Some form of fermented food is part of their daily diet;**
- **Their lifestyles require daily physical activity;**
- **They live at higher altitudes;**
- **Instead of drugs, they utilize herbs and traditional medicines to treat or prevent disease;**
- **Their water supplies are highly mineralized;**
- **Salt is unrefined and from the sea;**
- **They have a close, extended family/community structure and take care of and respect their elders;**

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- They eat lots of vegetables and fruits common to their area;
- They consume little, if any, sugar;
- They cook with natural saturated fats like butter and lard; and
- They don't smoke and rarely drink alcohol.

I can't tell you the exact amount of vitamins, minerals, amino acids, essential fatty acids, or other nutrients that you specifically need each day. Everyone has different genes, inherent weaknesses, habits, etc., making it difficult to make blanket recommendations. What I can tell you, however, is that a daily multivitamin/mineral supplement along with a healthy, varied diet can help cover a lot of bases.

Our Current Plan Isn't Working

It's apparent our current plan (if you could call it that) to treat disease or "prevent" it with a lifetime of drugs isn't working.

The latest figures from 2015 showed health care costs in this country have surged to 17 percent of our total gross national product (GDP)—\$3.207 trillion last year.

For the first time in history, health care spending in this country has reached \$10,000 for every man, woman, and child. That's double the amount of the next highest country and obviously higher than any country on Earth.

Experts are starting to wonder just how long our society can sustain these rising health care costs. Many hospital chains are now struggling.

Since the Affordable Care Act became law in 2010, there's been an increase in insurance coverage,

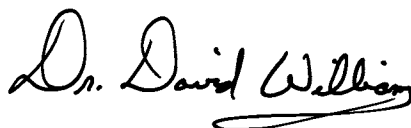
but it's come with much higher deductibles and cost sharing, which few people can afford to pay. Analysts say that when out-of-pocket charges exceed \$2,600, hospitals can forget about collecting. More than half of these hospital bills don't get paid, which adds up to over \$60 billion in uncompensated care. And this only drives deductibles higher.

I don't know how to solve all of these problems without some serious hardship. I do know that prevention and being able to treat problems nutritionally is more important than ever.

And when it comes to the claim that multivitamins do nothing but create expensive urine, I say this: I have no problem peeing out 50 cents or even a dollar or two of excess vitamins every day, knowing that I'm helping to supply my body with what it needs to function properly.

I honestly believe that every day your body has to go without the nutrients it needs, there's cumulative damage significant enough to shorten your life by a few minutes or hours each day. A good nutritional supplement program is cheap insurance—insurance you simply can't afford to be without.

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:

- *Strengthening Immunity*
- *Hiatal Hernia, GERD, and other Digestive Concerns*
- *Cognition and Brain Health*
- *Weight Loss*

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