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Is Your Diet Fit for a Dog?


Dr. David G. Williams

If you've been a subscriber to *Alternatives* for any length of time, you know that I'm a big fan of omega-3 oils. For years, I've personally taken and recommended the daily consumption of either freshly ground flaxseed or flax oil. I've also recommended the inclusion of fish and fish oils in your diet. I realize, however, that there are many individuals who, for one reason or another, don't like fish and/or won't invest the time or expense of including flaxseed or flax oil in their diet. This problem, combined with the ever-increasing consumption of omega-6 oils (corn, sunflower, safflower, cottonseed and soybean oils) is helping to fuel a dramatic rise in heart disease, cancer, diabetes, inflammatory problems, and numerous other diseases.

It's easy to see how harmful this trend is in humans, but it's even easier to see in animals. As I've mentioned in the past, I'm involved in a considerable amount of research involving thoroughbred racehorses in Australia. I also work with racing dogs there. The owners of these animals know just how quickly a bad diet can reflect in their animals' health. As a result, the owners are willing to spend whatever it takes to ensure their stock maintains the highest degree of health possible.

With a market like that, high-end feed manufacturers are often more on the cutting edge of nutritional breakthroughs than most manufacturers of human foods. The animal-feed producers are quick to incorporate any necessary oils, fats, trace minerals, and vitamins in their products. They know that deficiencies in these compounds will quickly become evident in the animals and jeopardize future product sales. With human foods, it appears to be a totally different story. If something tastes good, it will be a continuously good seller, regardless of the health consequences. One interesting result is that many of the animal owners I see have terrible health habits and suffer from every imaginable disease and health problem, while their animals are the picture of health.

What the animal-food producers have learned that seems to have escaped the general human population is that *food provides the raw materials from which all cells must be built*. It sounds like a simple idea, but, believe me, most people haven't grasped the concept.

You Are What You Eat—Fast

To see how quickly various fats are incorporated into new cells in an animal, just look at the omega-3-enriched eggs that are now on the market. I've reported in the past on these eggs, but the amazing thing is how quickly the eggs become omega-3 enhanced. Adding flaxseed to chicken feed immediately increases the omega-3 content of the eggs the chickens lay. (These eggs, like all eggs, are excellent to include

In This Issue

You will observe with concern how long a useful truth may be known and exist, before it is generally received and practiced on.

—Benjamin Franklin

in your diet. As I've stated many times, eggs are close to the perfect food and I think everyone should be eating them several times a week.)

The same thing happens in human cells. From the time you were conceived, every cell in your body has been growing, repairing, adapting, or reproducing. A good example would be the cells that make up the lining in your arteries. Due to the constant pounding of blood being pumped by the heart, pressure changes, and the friction and irritation from passing blood cells, the cells lining your arteries (endothelial cells) are being stretched and damaged on a daily basis. Like all the other cells in your body, the major components of these cell membranes or cell walls are lipids, including various forms of fat.

I won't get too technical here, but one group of lipids in the cell wall of arteries is called eicosanoids. Eicosanoids include body-process-regulating substances such as prostaglandins, thromboxanes, and leukotrienes. Research has shown that eicosanoids formed from omega-6 fats are associated with heart attacks, asthma, arthritis, inflammation, blood clots, dysmenorrhea, and headaches. Eicosanoids derived from omega-3 oils prevent these same problems. *(Lancet 99;353:1547-1557)*

When Feeling Better Means You're Doing Worse

An editorial by Dr. Alexander Leaf in the February 16, 1999, issue of *Circulation* magazine described a study involving flax oil. The equivalent of one teaspoon of cold-pressed flaxseed oil was added to the daily diet of each person in a study group, which resulted in a 70 percent reduction in deaths from heart disease compared to a group not getting the oil. This simple addition to the diet reduces heart disease deaths more than the focus of any cholesterol study ever performed.

What most people don't realize is that aspirin, ibuprofen, acetaminophen, and the COX-2-inhibiting medications work by reducing the effects of the eicosanoids derived from the omega-6 fats. Obviously, these medications are treating a symptom instead of the underlying problem. *If you're using any of these medications for pain relief, and they are effective for you, it's a pretty strong indication that you need to include more omega-3 oils in your diet. Keep in mind that this same essential fatty acid (EFA) imbalance, which contributes to your headaches or arthritic pain, could be the trigger of a future heart attack.* Unless your doctor happens to read this newsletter, don't expect him/her to make this connection for you.

When you understand the symptoms associated with an omega-3 deficiency, it's easy to understand our society's addiction to over-the-counter pain relievers such as aspirin, ibuprofen, and acetaminophen. The fact that sales of these medications continue to grow so strongly each year is only another indication that omega-3 oils are becoming one of our most common nutritional deficiencies.

The trick, like most things in life, is maintaining the proper balance. Omega-6 fatty acids have a place in our diet but they must be balanced with omega-3s. When in balance, certain omega-6-based components, such as gamma-linolenic acid (GLA) from borage seed oil, have been shown to be effective in treating certain conditions like rheumatoid arthritis. *(Ann Intern Med 93;119:867-873)*

Research has also shown that, under certain circumstances, GLA is one component that helps prevent cancer. With today's diets, most of us eat too few GLA-rich foods. Our bodies, however, can convert another common fatty acid into GLA (and into some of the beneficial prostaglandins) through the actions of a certain enzyme called delta-6-desaturase. Diabetics can't make this enzyme, and although it's not very well known, aspirin also blocks the production of delta-6-desaturase.

Keep Working on Your Balance

With our current eating habits and food supply, our omega-6 and omega-3 consumption is way out of balance. As I've mentioned in the past (see the February 2000 issue of *Alternatives*), the ideal balance of omega-6s to omega-3s is around 3:1 or 4:1, but the typical American diet provides closer to a 20:1 or 25:1 ratio.

I've discussed this topic on several other occasions, and I hope you've made a conscious effort to lower your consumption of omega-6 fats and increase the omega-3s. I certainly have. When I'm near a blender, I make sure I take my ground flaxseed every morning. When traveling, the flaxseed isn't always convenient, but I still eat fish several times a week.

As diligent as I try to be, I feel the need to increase my omega-3 fat intake even more. I would also encourage you to supplement your diet with additional omega-3 fatty acids. If you want to simply take an omega-3 supplement with your preferred multi-vitamin/mineral

complex, you can find stand-alone omega-3 products at your local health food store or you can order EFA Advantage from Mountain Home Nutritionals by calling 800-888-1415 (mention code 13621I). However, if you're currently taking Daily Advantage, I have arranged to include a separate omega-3 softgel tablet in each packet of this product, which you can also order by calling 800-888-1415 (code 13621I).

The omega-3s in EFA Advantage and Daily Advantage are from fish oil rather than flaxseed. The reason is that flaxseed oil contains alpha linolenic acid, which your body converts to the fatty acids EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid). For the majority of us, this isn't a problem. However, some data show that a certain percentage of elderly people have difficulty making this conversion. Fish oils, on the other hand, contain EPA and DHA that your body can use without having to make any conversion. Adding fish oil and continuing to take flaxseed daily will allow us to cover our bases and get the best of both. *(Am J Clin Nutr 91;54:438-63)*

As you know, I am continually monitoring the latest nutritional research, and when it warrants, I update and improve any formulations I'm associated with. Anytime I find something that I feel will help protect and/or improve our health, I'm going to pass it along. Besides, on a somewhat selfish note, my family and I take the exact same supplements I offer to you, and I want them to be the very best available.

Statistically Irrelevant

The latest government figures from the Centers for Disease Control show that life expectancy in the U.S. increased in the year 2000 to 76.9 years, up from 76.7 in 1999. Deaths from cancer and heart disease were down somewhat, while deaths from Alzheimer's, flu, pneumonia, high blood pressure, and kidney disease were up.

The only use I've ever had for this type of statistic is to watch for certain trends. Other than that, I don't find such data very useful. Averages really don't mean much when it comes to your health. If you happen to develop cancer, it's of little consequence to know that the odds are one in three that you will develop cancer in your lifetime.

Maybe I'm just paranoid, but, on a similar note, knowing that the average life expectancy is now 76.9 years doesn't really offer me any comfort either. Most of us aren't "average." If you're reading this newsletter, more than likely you're way above average and you realize that the quality of your life is just as important as its length—if not more so. The important thing to remember is that, with the right tools and information, you can take control of your health situation. Blindly following the teachings of conventional medicine is nothing more than playing the averages—basically, it's a crap-shoot.

A Simple Harmonic Notion of Bone Health

One of the things subscribers often write me about is their doctors' rejection of the advice I offer in *Alternatives*. That's not really surprising, since one of the reasons I started writing a newsletter was that I saw a lot of important medical information being ignored or rejected by established medicine. Even so, I understand people's need to show a respected doctor my newsletter and "get a second opinion."

The immediate problem a subscriber faces in doing this, of course, is that most doctors don't know what I'm talking about. Most of what I write about in these pages is outside their education or experience. To avoid admitting that, since they're supposed to be experts on all medical subjects, a common tendency is to reject the information they're presented out of hand.

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Lately, several letters have illustrated this problem with regard to my research on osteoporosis. A case in point is a recent letter I received from a subscriber in Phoenix, Arizona. I'll quote it here at some length:

I was recently told by my doctor that I had severe osteoporosis. Within days, I received the issue of Alternatives *in which you discussed pH problems and how an acidic diet caused the loss of bone.*

I showed my doctor your article and, to put it nicely, he didn't think much of the theories you presented. In fact, he told me osteoporosis was just one factor associated with aging and hormonal changes. As long as I was getting enough calcium and taking the medication he prescribed, I would improve. He felt that changing my diet and weight-lifting were useless and maybe even harmful for me.

Your article made sense, and you even gave some research studies to help make your point, but if what you say is true why haven't mainstream doctors adopted these ideas?

I could write volumes and still not be able to answer this question. I'm never sure why mainstream doctors don't accept some of the most basic ideas about health care. I guess there could be a hundred reasons—ignorance, brilliance, conflict of interest, money, insecurity, prejudice, laziness, etc. But rather than try to determine motives, which is always tricky, I want to write a bit more about the secondary subject of this letter: osteoporosis. It's a devastating problem, and one that, as this subscriber's letter hints, established medicine is still in the dark on.

Shake It or Break It

I have no doubt that most people would rather pop a couple of pills to correct their osteoporosis than change their diet and start exercising. Unfortunately, it won't work. Don't fall into that trap. It takes the diet change to stop the bone loss, and then it requires stress on the bones to make them rebuild.

This doctor should know from his physiology courses in medical school that when the crystal structure of bone bends or is placed under pressure, an electrical current is formed. This current triggers the movement of electrons, which sets up small, measurable vibrations (the frequencies of these vibrations can usually be measured more easily than the electrical current produced). The current, or perhaps the resulting vibration, also stimulates cell growth and mineral deposition. Without these vibrations or electrical currents, bones begin to weaken. We've seen this happen in space flights. Astronauts quickly begin to lose bone mass when there is no gravity to place the needed stress on the major weight-bearing bones in the body.

Researchers have found that vibrations or energy currents in the range of 20 to 50 Hz stimulate bone growth. Vibrations at these frequencies can be generated from several sources (which I'll write about throughout this article). Regardless of the source, numerous beneficial changes begin to take place in the body. The production of the body's natural anti-inflammatory compounds is increased. Joint pain and swelling improves. Bone fractures heal faster, and weakened bones begin to strengthen and rebuild.

Researchers at Brown University have been demonstrating for years how pulsed electro-magnetic fields, created from wires coiled around an injured bone or limb, accelerate healing and bone growth. *(J Cell Biochem 93;52(1):37-41) (J Bone Miner Res 89;4(2):227-33)*

Other researchers at the State University of New York demonstrated how weight-bearing exercises like walking, jumping or balancing positions, common to yoga or T'ai Chi, create these same tiny electrical currents in the bone. *In other words, weight-bearing exercises that stress the bone, either through direct pressure or by muscle action pulling on the bone, stimulate bone growth and remineralization. (Bone 02;30(3):445-52) (J Bone Miner Res 02;17(2):349-57) (Clin Orthop 98;(355Suppl):5216-29)*

The Opportunity that Slipped Away

Several years ago, I was approached to be a team physician for the U.S. Olympic bobsled team. It was a bit of a surprise, since I'd never been on a bobsled in my life (and still haven't). The individuals that approached me were interested in several techniques I utilized in my clinical practice, particularly one that involved vibrational stimulation. In several patients, I found that the therapy prevented or at least retarded muscle atrophy or wasting following severe nerve damage. Keeping the muscle healthy until the nerve supply was re-established resulted in some almost miraculous recoveries. (It became obvious that the Olympic team was more interested in my clinical abilities than my bobsledding experience.)

I had other obligations at the time, and never took the position, but I met some interesting people involved in that work. Some of the Russian doctors were also using mechanical vibration to treat musculoskeletal problems, and I learned a lot from them. They were also seeing some very exciting results. New research indicates that we were apparently on the right track. One recent study confirmed that vibratory stimulation to tendons is an effective technique to slow down the muscle wasting following an injury. *(J Appl Physiol 99;87(1):3-9)*

In the early 1980s, European researchers tested vibratory stimulation (50 to 150 Hz) on 731 patients suffering from either chronic pain (596 patients) or acute pain (135 patients). Overall, 82 percent of the individuals experienced some degree of relief from their pain. These results were remarkable because these patients had previously tried all types of pain-relieving medications and therapies without any relief. *(Acta Physiol Scand Suppl 83;523:1-51)*

A Purrfect Tool for Healing

Some of the most amazing research that I've run across, however, deals with cats. A group called the Fauna Communications Research Institute in Hillsborough, North Carolina, recently started some very interesting research focusing on the possible connection between vibrational frequencies and healing.

Researchers there began to question the purpose of purring in cats. I honestly hadn't given it much thought; I always thought cats purred because they were content. Apparently there's more to the picture.

Cats also purr when they give birth and when they are under stress, caged, or severely injured. Since purring expends energy, it makes sense that there would be a reason for it.

In an unpublished study, researchers recorded the purrs of all types of cats, both domestic and wild. Cheetahs, pumas, ocelots, and other wild cats were recorded at the Cincinnati Zoo. Various domestic cats were recorded elsewhere. Surprisingly, when the frequencies of the purrs were analyzed, it was discovered that the dominant frequency for three species of cats' purrs was exactly 25 Hz or 50 Hz. These just happen to be the most effective frequencies for promoting bone growth and repair. (Only the cheetah didn't have a dominant frequency at 50 Hz.)

Everyone has heard that "a cat always lands on its feet." The amazing righting ability behind this saying undoubtedly accounts for the fact that cats routinely survive and completely recover from falls that would kill most animals. In the late 1980s, vets studied the cases of 132 cats that had fallen an average of 5.5 stories from various high-rise apartments. Of those, 37 percent required emergency treatment, 30 percent required non-emergency treatment, and the remaining 30 percent, no treatment at all. Overall, 90 percent of the cats survived. *(J Am Vet Med Assoc 87;191(11):1399-40)* (For what it's worth, the highest recorded fall survived by a cat was 45 stories.)

Another Reason Not to Kick the Dog

Cats' remarkable ability to survive may also be based on the fact that their dominant purr is at the exact frequency that heals bones, muscles, and ligaments. There's another old saying that's popular among veterinarians, "If you put a cat and a bunch of broken bones in the same room, the bones will heal."

A recent study evaluated the various health problems presented by 31,484 dogs and 15,226 cats to 52 private veterinary clinics around the country. Lameness and disc disease were among the top problems of dogs and 2.4 percent were severely arthritic. Kidney and bladder problems were most prominent among cats, and there was no mention of bone, arthritis, or joint problems at all. *(J Am Vet Med Assoc 99;214(9):1336-41)*

Hip dysplasia, arthritis, and ligament and muscle damage are all common to dogs, but almost non-existent in cats. Even myeloma, a cancerous tumor in bone marrow, is practically unheard of in cats, yet quite common in dogs. Any vet will tell you how much easier it is to fix a broken bone and how much quicker one heals in a cat compared to a dog.

Researchers at the Ontario Veterinary College in Canada made some very interesting comparisons between dogs and cats regarding their complications from elective surgeries. They found that complications from castration were as much as 20 times higher in dogs than in cats, and the post-operative problems following ovariohysterectomies occurred twice as often in dogs as cats. *(Can Vet J 96:37(11):672-8) (J Am Vet Med Assoc 96;208(111):1882-6)*

Breathing problems associated with heart disease are almost non-existent in cats, but common

in dogs. Large skin-tissue grafts take quickly in cats, but often become necrotic in dogs. Historically, bone cancer is extremely rare in cats, but common in dogs. And the list goes on and on.

Purring appears to be a cat's way of treating itself. Just like humans use shivering to warm the body, cats may purr at specific vibrational frequencies that promote healing in various parts of their bodies. While the researchers in the above-mentioned unpublished study found that a cat's dominant purring frequency might be at 25 Hz or 50 Hz, the range extended up to 140 Hz. By changing the frequency of their purring, cats may be fine-tuning their healing abilities.

Put a Cat in Your Hat and Call Me in the Morning

What makes this research exciting is the fact that *these frequencies have already been shown to elicit various healing effects in humans*. It's not like most studies, where the work is first done in animals and then we have to see if the same phenomenon occurs in humans. The work with cats was conceived based on work already done with humans.

There are other mechanical means we probably unknowingly utilize to help facilitate healing. How many people sleep better, and feel more rested afterwards, with a fan or window air-conditioner running in the background, especially when the bed rests on a wooden floor? Why do newborns and many adults quickly fall asleep when riding in certain automobiles or trucks? I suspect it might be related to the vibrational frequencies being emitted in these instances. Could the monotone chants and mantras used during meditation have a similar effect to purring? It wouldn't surprise me.

This same idea can probably help explain some of the healing effects associated with mechanical vibrators, massage, classical music, and even laughter. I've even seen reports where individuals claim they can stop their migraine headaches by lying down with a purring cat next to their head. Maybe we're finally on track to discover a logical explanation for these incidents.

It would be interesting if someone measured these various frequencies. I've always felt that the work of pioneers like Royal Rife, who studied the effects of subtle frequencies on human cells, had merit. For years, I've been wading through that minefield trying to sort out the facts from the hype. After learning about the above research, I'll probably be going back to take a closer look. As always, I'll let you know if I find something that might be helpful.

Good Health Demands a Little Stress

I may have gotten a little side-tracked from the letter writer's original question (as they say here in Texas, "there's no maybe about it"). The fact of the matter is that our bodies were made for movement. We need exercise, and to achieve optimum health we need a variety of exercises on a regular basis.

Unfortunately, this latest information on purring might not be the stimulus that will change the thinking of doctors like the one described in the above letter. Still, things are gradually changing.

It used to be that when someone broke a bone, they were placed in a rigid cast and instructed not to move it for weeks. Now, more flexible casts are being used, and movement and even weight-bearing is encouraged. Why? Because bones grow stronger and rebuild faster when they are placed under stress.

Tendons may be affected in the same way. A Canadian doctor has presented research indicating that tendonitis is a myth. Dr. Karmis Khan, with the University of British Columbia, has reported that there is no such thing as inflammation of a tendon. He says that tendons are made of collagen and are like ropes. Problems occur when some of the strands of the rope break or become frayed. To heal these problems, more emphasis must be placed on collagen repair—not on painkillers or anti-inflammatory medications that do nothing in the way of healing.

Surprisingly, what speeds and improves the recovery process is strengthening exercises and stretching of the injured tendon. Even though these techniques may temporarily increase the pain, they have been shown to stimulate tendon cells to repair the damage. And while it's important to understand that collagen repair always takes time (three to six months is not uncommon, since the blood supply is poor), without strengthening exercises, some cases of these problems are never resolved. *(BJM 02;342(7338):626-7)*

The same healing principle is at work in tendons as in bone. Stressing tendons creates tiny electrical currents/vibrations that facilitate their growth and healing. If we're lucky enough to discover that the same vibration/healing connection

exists in humans as in cats, bone and tendon won't be the only tissues affected by this process.

From a practical standpoint, I'm not yet recommending that you begin purring, or sleeping with your cat (though, based on what I've seen, that may change). I do suggest that you find a variety of different physical activities you enjoy and include them in your daily routine. Your body needs and craves physical weight-bearing stress. I'll keep checking on the vibrational aspect of healing. I have a gut feeling that it's something we need to know about. In the meantime, utilize a mantra when you meditate—and meditate longer and more often. Try to feel the vibration throughout your body as you "purr." Enjoy the sound of the fan in your room as you rest at night. Just don't get the idea that watching TV all day in your vibrating recliner will equip you with nine lives like the cat purring next to you.

A Tasty Prescription for Prostate Health

The phytonutrient lycopene has been in the news for quite some time now. Continued research has shown that it is a potent antioxidant and can help prevent both heart disease and certain forms of cancer, particularly prostate cancer. Until now, the tomato has been lycopene champion. Although the lycopene in raw tomatoes is not very bioavailable (absorbable by the body), cooked and homogenized tomatoes have been considered one of our best food sources. (Tomato sauce and paste are still excellent sources for lycopene, but you'll absorb even more if they are mixed with a little olive oil.)

Scientists with the U.S. Agricultural Research Service have now found that watermelon is an even better source of lycopene than tomatoes. During their testing, they found that other fruits, such as red and pink grapefruit and guava, were also rich in lycopene, but the bioavailability was poor. Watermelon was a different story. One-and-a-half cups of watermelon contain between 9 and 13 mg of lycopene, which is 40 percent more than tomatoes, and the body easily absorbs it. Red, ripe, seedless watermelons had the highest lycopene content.

Although the amount of lycopene in just 1½ cups of watermelon might seem trivial, a recent report illustrates just how powerful it can be when it comes to something as serious as prostate cancer.

Doctors at the Wake Forest University School of Medicine recently released details of a 62-year-old gentleman with androgen-independent prostate cancer that had spread to his bones. He had undergone numerous treatment programs and all had failed. All other forms of treatment were stopped and his only treatment was taking 10 mg a day of lycopene and 300 mg of saw palmetto three times a day (900 mg per day total).

After the first month, his PSA (prostate-specific-antigen) level dropped from 365 ng/mL to 140 ng/mL. At the end of two months, his PSA level was down to 8.1 ng/mL. A bone scan then showed that the metastases were improved. Since then, he remains on the supplements, continues to improve, and has been asymptomatic. *(J Urol 01;166(2):613)*

Androgen-independent prostate cancer (prostate cancer that is not necessarily hormone related) is very difficult to treat. Although saw palmetto must have lent a helping hand in this instance, it generally isn't effective at reducing PSA levels. It's better at reducing prostate enlargement associated with BPH (benign prostatic hypertrophy). What's amazing is that such a small amount of lycopene can produce such a powerful result. You could get this much lycopene from the 1-1/2 cups of watermelon mentioned above or roughly three tablespoons of tomato sauce. It's obvious that we can underestimate the importance of eating a wide variety of fresh fruits and vegetables *every single day*.

With watermelon season now upon us, don't forget to have a couple of cold slices after you finish your pizza.

How to Build Weak Eyes 12 Ways

When I was growing up, I remember being told that something would make me go blind, but I didn't recall it being bread.

Loren Cordain, a biologist at Colorado State University, feels he may have uncovered the reason myopia has been dramatically increasing over the last 200 years.

Myopia, or nearsightedness (where it's easier to see close objects better than those at a distance), now affects over 30 percent of the population of European descent.

Cordain feels that an ever-increasing amount of refined starches in our diet has adversely affected the development of the human eyeball. There's little doubt that the Western diet now includes far more processed breads, cereals, and sugars than at any other time in history.

Compared to complex starches, such as whole grains that were common in diets of the past, these highly processed starches are quickly digested and cause a corresponding rapid increase in blood-sugar levels. To counter this effect, the pancreas pumps out additional insulin. Researchers have known for some time that spiking insulin levels lead to a decline in the levels of insulin-like binding protein-3. This, in turn, disturbs a fragile process that coordinates eyeball length and lens growth. If the eyeball grows too long, the lens isn't able to flatten enough to focus the image on the back of the eyeball. The result is myopia, or nearsightedness. In summary, refined starches and sugars raise insulin levels, which cause the eyeball to grow too long.

The Results Are Already In

Other researchers are now planning animal studies to test Cordain's theory, but, when you look closer, it appears that these experiments have already taken place among the human population.

Cordain cites research that, in the early 1900s, only about one percent of certain populations such as the Inuit and Pacific Islanders had myopia problems. Now, these same groups experience a myopia rate as high as 50 percent.

Some have suggested that close reading and computers are to blame, and compulsory education, which was implemented in these groups, has created the problem. But that argument really doesn't hold much water when you look at countries like Vanuatu (an island country east of Australia), where they have eight hours of compulsory education a day and myopia in only two percent of the educated population. The difference appears to be in the diet.

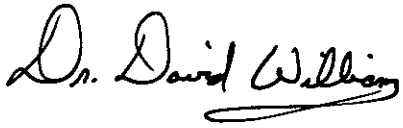
While the people of Vanuatu have adopted much of the Western lifestyle, their diet still consists of seafood, yams, and coconuts. What they don't eat are refined grains, white bread, and cereals.

I have little doubt that Cordain's work will be supported by additional research. We already know that overweight individuals and those who develop adult-onset diabetes have a greater tendency to develop myopia. In both of these cases, insulin levels are elevated above normal. It has also been shown that the progression of myopia in children can be slowed dramatically by placing them on a diet higher in protein and lower in refined carbohydrates.

This is certainly further proof that our last few generations (you and I included) are unwitting participants in one huge biological experiment. The only way I know to opt out of this experiment is to stay away from processed foods as much as possible. The closer our foods are to their natural state, the better our overall health will be.

Maybe sometime in the not-so-distant future, we'll hear mothers telling their children not to eat white bread because it will make them go blind.

Take care,



If you have questions or comments for Dr. Williams please send them to the mail or email addresses listed to the right. Of course, practical and ethical constraints prevent him from answering personal medical questions by mail or email, but he'll answer as many as he can in the Mailbox section of *Alternatives*. For our part, we'll do our best to direct you to his issues, reports, and products related to the subject of your interest.

Here's how you can reach us:

- To send in Mailbox questions or Health Hints, write to P.O. Box 61010, Potomac, MD 20859-1010 or mailbox@drdavidwilliams.com
- For Customer Service matters such as address changes, call 800-527-3044 or write to custsvc@drdavidwilliams.com
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