

Alternatives[®]

FOR THE HEALTH-CONSCIOUS INDIVIDUAL

September 2003

Volume 10, No. 3



Dr. David G. Williams

Chew on This for Strong Bones

If the eyes are the windows to the soul, then the mouth may be the window to the skeleton.

It's a common misconception that x-rays, CAT scans, and bone density tests are the only "windows" through which we can assess bone health. In reality, our jaw structure and teeth are part of the skeletal system and will often provide an important glimpse of what's going on at a deeper level throughout the body.

More than a year ago, I explained how the consumption of too many acid-producing foods would disrupt the body's pH balance and result in a chronic pattern of bone loss (*Publisher's note: See Alternatives Vol. 9, No. 11, May 2002*). Research has shown that our acid-producing Western diet, high in meat, refined flour, sugar, and soft drinks, has triggered an increasing problem of osteoporosis. Osteoporosis, in turn, is now responsible for hundreds of thousands of hip fractures, spinal compression fractures, the loss of mobility and independence, and even death—particularly in the elderly.

The obvious solution is an immediate change in the diet to return the body to a more alkaline state. When an alkaline-producing diet is accompanied by weight-bearing exercise and adequate amounts of calcium and other minerals, bone loss can be corrected. One of the problems is that most people don't see a need to make these changes until it becomes obvious that something is wrong. It stems from the age-old feeling that "I'm different," or "it won't happen to me." That's one reason there has been a big push over the last several years to have women take bone density scans. These scans, most commonly the Dual Energy X-ray Absorptiometry (DEXA), measure bone density and compare it to that of

an "average" 35-year-old woman. If the density is less, which is likely for anyone older than 35, then lifetime drug therapy is prescribed to treat the "disease." Unfortunately, drugs do little if any good and have some very serious side effects. (Without dietary changes, adequate minerals, and weight-bearing exercise, bone growth simply isn't going to return to normal.)

Fortunately, some symptoms usually occur long before something as serious as a fracture takes place. One of the first areas where osteoporosis can be seen is in the mouth.

The Hip Bone's Connected to the...Jaw Bone

Most people don't consider the teeth to be part of the body's living bone structure. But, like other bone, your teeth and the jaws that house them contain nerves and blood vessels, and require the proper nutrients for growth and repair. And just like other bones in an overly acidic and undernourished environment, teeth begin to break down, weaken, and become susceptible to infection. Gum infections and periodontal disease can be thought of as localized osteoporosis of the teeth and jaw bone. As the infection continues, the gums begin to recede, resulting in more bone loss in the supporting jaw. For some unknown reason,



In This Issue

| | |
|--------------------------------------|----|
| Chew on This for Strong Bones | 17 |
| We're Still on the Right Track. | 22 |

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

very few doctors seem to be aware that osteoporosis in the hip joints and other large bones is routinely preceded by periodontal disease. The sooner you make the connection and take appropriate steps to remedy the problem, the sooner you can start to reverse osteoporosis.

I've discussed ways to treat periodontal infections using tools such as Citricidal (grapefruit seed extract) and hydrogen peroxide, as well as gum massage with special toothpicks, brushes, and the Sonicare electric toothbrush. (See *Alternatives* Vol. 8, No. 24, June 2001.)

Another item that helps stop periodontal disease and could also help reverse osteoporosis is xylitol, a natural sweetener found in many fruits and vegetables. It is currently being made from sugar cane pulp in China, and may soon be produced from corn cobs in the U.S.

A Sweet Solution to Brittle Bones

Eating foods sweetened with xylitol or just taking the substance has been shown to remineralize tooth enamel, prevent inner ear infections, and reduce cavities, dental plaque, and the plaque acids that erode teeth. (One of my favorite xylitol products is the nasal wash Xlear, because it works so well on colds, flu, and throat infections. Regular use can even eliminate asthma problems.)

Two Finnish animal studies have shown that xylitol can help maintain and even increase bone density. One tested the effects of xylitol on female animals whose ovaries had been removed. Normally after this surgery, the animals begin to lose bone mass and quickly develop osteoporosis, but that didn't happen. Bone density was maintained through the regular use of xylitol. (*Bone Miner* 94;26:81-88) In the other study, aging male animals that would normally start to lose bone density were given xylitol daily. After just 20 months, their bone density had increased by almost 10 percent. (*Gerontology* 01;47:300-305)

Exactly how xylitol helps increase bone density isn't fully understood. It appears to increase the intestinal absorption of calcium. It may also make the vitamin D receptors more sensitive and enhance the beneficial effects of vitamin D.

To achieve similar effects in humans, the daily dose of xylitol would be roughly 40 grams (approximately 1.5 oz, or 3 tablespoons). While that might sound like a lot, xylitol is safe, with no known side effects, especially at such a relatively low dosage. (Dosages as high as 400 grams

per day have been given to humans long term without any problems, except for occasional initial bouts of diarrhea. Your body actually makes as much as 11 grams of xylitol per day.)

Many people, especially diabetics and those with hypoglycemia, seem to always be looking for a sugar substitute. Xylitol is a great alternative. It is equally as sweet as sugar without the aftertaste commonly associated with stevia. Whereas sugar has 4 calories per gram, xylitol only has 2.4 calories per gram. Xylitol can be substituted directly for sugar in cooking and other sweetening tasks. And it breaks down slowly, so it doesn't cause a spike in insulin levels.

Xylitol can be purchased as a bulk crystalline powder. Though initially more expensive than sugar, it's an absolute bargain in terms of your health. If you take 40 grams per day, the cost is in the neighborhood of \$15 a month. (This estimate is based on purchasing xylitol in a 10-pound bag. Lower costs can be achieved by purchasing even larger quantities.) I've included two sources for bulk xylitol at the end of this article.

Even if you don't have osteoporosis, switching from sugar to xylitol can still deliver enormous benefits, particularly when it comes to dental health and acute or chronic throat, sinus, respiratory, or inner ear infections.

For Want of a Tooth, the Body Could Be Lost

I can't stress enough the importance of good dental health. Not taking care of periodontal disease can lead to very serious problems. The systemic effects of osteoporosis such as hip, vertebra, and wrist fractures may take years, or even decades, to manifest. But millions of individuals don't live long enough to experience these problems. Instead, they die from a stroke or heart attack, which ultimately started from something as seemingly harmless as a chronic gum infection.

If you study medical history you'll discover that in the early 1900s the biggest risk factor for death from heart disease was infection of the tooth or jaw. With the widespread use of antibiotics, most doctors think this is no longer a major contributing factor. New research has shown otherwise.

One procedure that has become increasingly common is carotid endarterectomy, or stripping the lining of the carotid artery. This is the major artery that runs from the heart along either side of the neck to the brain. Researchers at the State

University of New York examined tissue samples of atherosclerotic plaques that were stripped from 50 individuals. *In 72 percent of the tissue specimens, researchers found bacteria.* Of these, 18 percent tested positive for *Chlamydia pneumoniae*, 38 percent were positive for human cytomegalovirus, and 44 percent were positive for at least one known periodontal pathogen (59 percent of those contained more than one periodontal pathogenic bacteria, such as *Bacteroides forsythus* or *Porphyromonas gingivalis*.). (*J Periodontology* 00;10:1554-60)

According to this research, many artery-clogging plaques contain the same bacteria that cause gum disease. What happens is that the gum disease-causing bacteria enter the bloodstream, leading to inflammation on the walls of arteries, which in turn leads to plaque formation, or arteriosclerosis (clogging of the arteries).

Lately, the buzz phrase in cardiac medicine has been C-reactive protein (CRP). At the risk of oversimplifying matters, CRP is a blood “marker” that indicates inflammation is occurring somewhere in the body. And inflammation is known to damage arterial walls and lead to such problems as arteriosclerosis, heart disease, heart attack, and stroke.

A newer class of drugs called statins lowers CRP in the body. Some doctors even feel that the best way to prevent heart disease is to prescribe broad-spectrum antibiotics to knock out any infections and their resulting inflammation. Several magazine articles have called this a breakthrough and a sure-fire method to rid society of heart disease. Again, these approaches treat the symptom and not the cause. Unless it is absolutely necessary, I can't see why anyone would want to take any drug for a lifetime.

Unfortunately, doctors in this country prescribe many different medications without regard to their cumulative effect on a patient's health. Even if there were an interest in keeping up with

the potential side effects of all the medications, it's practically impossible for even a well-trained and thoughtful doctor to do so. The average patient doesn't stand a chance.

Metformin (Glucophage), a drug to treat diabetes, has been embraced by the anti-aging crowd in hopes that it will extend their lives. I suspect that most of those taking this drug are unaware it decreases vitamin B12 absorption. This can lead to a long list of problems, including elevated homocysteine levels, which are strongly associated with heart disease.

As I explained earlier, osteoporosis and periodontal disease go hand in hand. Similarly, poor dental hygiene and nutrition have to be addressed to successfully prevent or treat heart disease, heart attacks, and stroke.

Dozens of studies have shown that in many cases CRP can be directly linked to periodontal disease. And once the disease is addressed, the CRP levels subside. Researchers at the University of North Carolina reported that 85 percent of heart attack patients have periodontal disease, compared to only 25 percent of individuals who haven't had a heart attack. (*BMC Infect Dis* 02;2(1):20) (*AMJ Med* 02;113(6):462-7) (*J Periodontol* 01;72(9):1221-7)

If you have periodontal disease, you're setting yourself up for a future stroke or heart attack. The presence of periodontal disease may be as important as high blood pressure, elevated cholesterol levels, smoking, or family history as a risk factor for death due to heart disease or stroke. (*Ann Periodontol* 01;6(1):20-9) (*Ann Periodontol* 98;3(1):127-4) (*Curr Opin Periodontol* 97;4:21-8) (*Compendium* 94;15(8):976,978-82,985-6)

Let Me Make This Perfectly Xlear...

You probably won't hear this from your doctor—99 percent of them don't have a clue—but the simple act of substituting xylitol for sugar in your diet can be a crucial step in preventing or



ALTERNATIVES

ISSN# 0893-5025. Published monthly for \$69.99/yr. by Mountain Home Publishing at 7811 Montrose Road, Potomac, MD 20854. Editorial Office: 7811

Montrose Road, Potomac, MD 20854. Periodicals postage paid at Rockville, MD and at additional mailing offices.

POSTMASTER: Send address changes to *Alternatives*, PO Box 2050, Forrester Center, WV 25438. Copyright © 2003 All rights reserved. Photocopying or reproduction is strictly prohibited without permission from the publisher.

Author: Dr. David Williams; Publisher: Glynnis Mileikowsky, Editor: Meg de Guzman

The approaches described in this newsletter are not offered as cures, prescriptions, diagnoses, or a means of diagnoses to different conditions. The author and publisher assume no responsibility in the correct or incorrect use of this information, and no attempt should be made to use any of this information as a form of treatment without the approval and guidance of your doctor.

Dr. Williams works closely with Mountain Home Nutritionals, a division of Doctors' Preferred, Inc. and subsidiary of Phillips Health, developing his unique formulations that supply many of the hard-to-find nutrients he recommends. Dr. Williams is compensated by Doctors' Preferred, Inc. 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.

eliminating gum disease, tooth loss, asthma, inner ear infections, chronic throat and sinus conditions, osteoporosis, and cardiovascular disease. Studies have shown that xylitol makes it hard for pathogenic bacteria to attach and “set up house” in the oral cavities. Also, the bacteria that remain attached ingest the xylitol and, over time, mutate to become less and less pathogenic.

Xylitol-sweetened gums and mints are good ways to benefit from this “friendly” sugar. But buying it in bulk will be the most cost-effective way. A good supplier is XylitolNow, phone 619-445-2689. *Note:* You may get voicemail when you call. They ask that you leave a short message and the best time to call you back, including your time zone. XylitolNow is offering two specials for *Alternatives* subscribers: a 4 pound bag of xylitol crystals for \$22 and a 10 pound bag for \$48, plus \$5.95 s/h. These are also posted online at www.xylitolnow.com/alt.html.

Another option is to order XyloSweet xylitol from Mountain Home Nutritionals, (800-888-1415). A 2-pound canister sells for \$16.99, plus s/h. Mention code 26938E.

A Strong Case for Strontium

Back on the osteoporosis front, there are a few developments you should know about. European researchers have started to validate research from the 1940s and '50s showing that the mineral strontium can help prevent and treat osteoporosis.

Strontium is considered a trace mineral and is generally found along with calcium in foods. And while strontium can help to prevent and reverse osteoporosis, the amounts found in food are generally too low to do so.

Early animal studies found that when supplemental strontium was added to the diet, it both decreased the breakdown of existing bone and increased the formation of new bone tissue. There are now human studies showing similar results. (*Osteoporos Int* 02;13(12):925-31) (*Osteoporos Int* 02;13(6):521(AbsO45) (*Bull Hosp Joint Dis* 52;13(1):59) (*J Clin Endocrinol Metab* 02;87(5):2060-6)

In these studies, the bone mass of women taking calcium, vitamin D, and strontium supplements was compared to that of women taking only calcium and vitamin D. Over a two-year period, those taking only calcium and vitamin D experienced an increase in their *spinal* bone

mass density (BMD) of 0.5 percent per year. Those who also took strontium had spinal BMD increases of 2.97 percent.

During the same two-year period, those taking the strontium saw their *hip* BMD increase by 3.05 percent, while those not taking strontium *lost* 0.57 percent of their hip BMD. In addition, those women taking strontium experienced only 56 percent as many new spinal vertebral collapses or deformities as those not on the strontium.

In a three-year study involving 1,649 women, it was found that women taking strontium in addition to calcium and vitamin D increased their spinal BMD by 11.4 percent, while those on just calcium and vitamin D lost 1.3 percent of their spinal BMD. The group on strontium also had 59 percent fewer fractures during that period compared to those not taking the mineral supplement. Other studies have shown that when strontium is taken with calcium and vitamin D, it can improve BMD in the neck of the femur, as well as the spinal vertebra and hip structure.

In studies as long as four years, no side effects have been reported with taking strontium. The above human studies suggest that a dose of 680 mg of strontium daily seems to give the best results. Calcium (1,200–1,500 mg per day) and other supportive minerals, such as magnesium, and vitamins D and K need to be taken daily as well.

You probably won't be hearing much about strontium, because it can't be patented. I'm sure it's one of the reasons this therapy fell by the wayside years ago. Plus, pharmaceutical companies have released several new drugs—Forteo, Fosamax, Didronel—and will be releasing others to capitalize on the ever-growing problem of osteoporosis. According to the National Osteoporosis Foundation and other authorities, more than 8 million women and 2 million men have osteoporosis, and another 18–20 million have osteopenia, an early stage of the problem.

These numbers will only continue to increase as the Baby Boomers age. This is really the first generation exposed to a lifetime of sodas, fast food, abundant over-the-counter medication, and other acid-forming products. The pharmaceutical companies recognized years ago this was going to be a golden opportunity, and now they're prepared to take advantage of the situation.

There aren't many strontium products available at this time. An excellent product,

Strontium Support, is being sold by a Canadian company, Advanced Orthomolecular Research. Each capsule contains 227 mg, so to achieve the dosage used in the above studies would require three capsules per day. Each bottle contains 90 capsules, or a month's supply. Advanced Orthomolecular Research doesn't sell directly to the public—only to doctors. If your doctor doesn't carry Strontium Support, you can order it directly from Supplements Etc. at 800-475-4372, or online at www.supplementsetc.com. Their price per bottle is \$33.72.

Good Vibrations

On a couple of occasions I've reported on the Russians' study of mechanical vibration to treat a variety of musculoskeletal problems. Their early experiments were performed on military personnel and Olympic athletes. Much of their research was unpublished, but over the last ten or twelve years, additional studies in Europe and the U.S. have begun to show that vibratory stimulation can have a profound effect not only on the musculoskeletal system, but on circulation and hormone levels as well.

Most of the research has been conducted using a mechanical vibrating plate upon which an individual stands. When the plate is adjusted to the right frequency, just standing on it will cause the body's postural muscles to contract anywhere from 30 to 50 times a second. As the body ever so slightly shifts back and forth, the muscles must contract and relax with each shift. In just eight to ten minutes, an individual can complete a full "workout." Doing this three times a week can lead to dramatic results. (Studies have shown that using the vibrating plate more than three times a week didn't provide any additional benefits.)

In just ten minutes, several things begin to occur. The muscles get a tremendous workout, resulting in increased strength, stability, and tone. Blood flow increases throughout the body. Joints become stronger yet more flexible. Studies have also shown that levels of the "stress hormone" cortisol decrease, while levels of other hormones, such as growth hormone and testosterone, which are important for regeneration and repair processes, actually increase. (*Eur J Appl Physiol* 00;81:449-454)

Moreover, vibratory stimulation can help alleviate acute and chronic pain. In one study of

731 patients, all of whom had tried all types of pain-relieving medications and therapies without success, 82 percent experienced at least some degree of relief using vibratory stimulation.

When I first reported on mechanical vibration machines, no one was producing these devices for sale in the U.S. Now, a very high-quality machine, the Power Plate, is available.

Whole-body vibration therapy, as it's now called, can be and is being used by everyone—from professional athletes to frail, osteoporotic individuals. The reports I've received are remarkable. Dozens of professional football, baseball, basketball, and hockey training facilities now have the Power Plate, including the New York Mets, Cincinnati Reds, and Chicago Cubs. University athletic departments, martial artists, and the military have found that, in addition to increasing strength and agility, vibration therapy can reduce sports injuries, speed rehabilitation, and shorten healing time. A representative from the Power Plate company told me that Shaquille O'Neal, Clint Eastwood, Julie Andrews, Don Johnson, and many other athletes and actors have their own Power Plates.

Vibration therapy can be used by itself or along with weight lifting and other muscle-strengthening techniques. Vibration training can increase muscle strength 20–30 percent more than conventional strength training while cutting training time dramatically. There are also a number of exercises that can be done on the machine. The vibration effectively increases the force placed on muscle fibers by a factor of 3 Gs, or three times the force of gravity.

This is one of the easiest ways I know that someone of any age or condition can increase joint mobility, muscle strength, overall circulation, bone strength and density, and overall fitness. When combined with the right supplements and diet, it might be the ideal tool to help combat osteoporosis, particularly in the elderly where the use of weights and other active forms of exercise can put undue strain on fragile joints and already weak bone structures.

If there's a downside to the Power Plate, it's cost. I hope you're sitting down. It sells for \$9,995. Normally I don't even mention items this expensive. As you know, I like remedies that are inexpensive, safe, and effective. The Power Plate meets two of these criteria. And when it comes to reversing osteoporosis and increasing muscle

strength and overall stability, I don't know of anything besides weight lifting that can achieve the same results. Unfortunately, weight lifting isn't an option for some. But it couldn't get any easier than standing on a vibrating platform for a few minutes, three times a week. I guess if you compare it to the cost and consequences of a hip fracture, then the price doesn't seem so high.

There's another benefit that might also be of interest. Many people are now using human growth hormone at a cost of hundreds of dollars a month to help stop the effects of aging. A recent study found that using whole-body vibration therapy increased growth hormone levels by 361 percent. When you count it against the cost of these hormone injections, the Power Plate would pay for itself in less than a year. (*J Applied Physio* 00;81:449-454)

Power Plate North America has agreed to give *Alternatives* readers a substantial discount, lowering the cost to \$8,500. (Be sure to give the reference code DW12MD.) For more information on the Power Plate, or to see if there is a machine in your area, check their Web site at www.powerplateusa.com. You can also write to Power Plate North America, 5730 Uplander Way, Suite 110, Culver City, CA 90230, or call toll-free 877-877-5283.

We're Still on the Right Track

In my lifelong quest for legitimate health cures, there are times when I wonder if I'm really on the right track. After spending days in some mosquito-infested marsh to learn about an ancient plant remedy, I can turn on CNN or the evening news and hear that the cure to practically every known disease can be eliminated using gene therapy, stem cells, broad-spectrum antibiotics, a newly formulated drug, or some other technological breakthrough.

At these times, uncovering the secrets of some 2,000-year-old herbal remedy seems like a step in the wrong direction. The mantra of the day seems to be that technology will save mankind from its indiscretions. By comparison, using an ancient remedy or reverting to a more basic diet is not just living in the past, it's also troublesome, very inconvenient, and definitely not on par with the latest research. However, after all the promises and hype, a quick look at our overall health makes clear that the past holds many of the answers to our current problems. Many of the more com-

plex, breakthrough health "cures" cause more or more serious problems than they resolve. Dozens if not hundreds of examples bear this out.

Excessive Force Often Creates a Backlash

Not too long ago, the bacterium *Helicobacter pylori* was claimed to be the primary cause of peptic ulcers. Little did it matter that this bacterium resides in the gut of 50 percent of the world's population. *H. pylori* was a newly discovered culprit. It was blamed for practically every known digestive complaint, and antibiotic use soared in an effort to eradicate the pathogen. Yet, like thousands of other strains of bacteria in our environment, *H. pylori* doesn't seem to cause problems when its numbers remain in balance with other bacterial flora. In fact, researchers from Stanford University school of medicine recently reported that individuals with *H. pylori* in their system have a 72 percent lower risk of developing esophageal cancer than individuals without the bacterium.

Similar studies have questioned the use of a medical procedure called eradication therapy, wherein antibiotics are used to wipe out or "cure" an *H. pylori* infection. *H. pylori* has been shown to lower the acid-secreting ability of the stomach, which appears to provide a protective effect against acid erosion of the esophagus and small intestine. Many individuals begin to experience acid reflux (gastro-esophageal reflux disease, or GERD) when the bacterium is totally eliminated from the body. Continued damage and destruction to the tissues can then lead to esophageal cancer. Some authorities now believe that the widespread use of antibiotics and the reduction in gastrointestinal *H. pylori* may be why the incidence of esophageal adenocarcinoma has been increasing faster than any other cancer in the U.S. and parts of Europe over the last 20 to 30 years. (*Semin Thorac Cardiovascular Surg* 03;15(2):158-66) (*Nippon Rinsho* 02;60(8):1639-43) (*Gastroenterol Clin North Am* 02;31(2):421-40)

The reasonable solution is to achieve a natural balance in the bacterial flora. Not only is selectively wiping out *one* strain of bacteria impossible, but attempting to do so only further disrupts the natural balance. As you know, when strains of beneficial bacteria are eliminated or depleted, an overgrowth of harmful bacteria can occur, resulting in all kinds of problems.

The diets of our ancestors, particularly of civilizations that lived very long lives, were rich in naturally fermented foods, which helped keep the number of pathogenic bacteria in check. That's one of the primary reasons I'm such a strong advocate of naturally fermented foods and probiotic supplements.

Big Pharma and Small Flora

I don't make many predictions, but I predict that probiotics will soon be something the pharmaceutical companies seriously pursue. Currently, probiotics are food products. When pharmaceutical firms realize just how effective and potent probiotics are, don't be surprised to see a big push to have them regulated as drugs.

Hundreds of clinical studies have shown that probiotics can prevent and treat hundreds of common ailments. (I wrote an in-depth article on probiotics in *Alternatives* Vol. 3, No. 1, July 1989.) Just a few of these ailments include:

- | | |
|------------------------------|---|
| • irritable bowel syndrome | • bladder infections |
| • GERD | • vaginal infections |
| • diarrhea | • intestinal infections |
| • constipation | • allergies |
| • inflammatory bowel disease | • high cholesterol |
| • colon cancer | • numerous antibiotic-induced disorders |
| • lactose intolerance | |

The above list could go on for pages, and it won't take long before the pharmaceutical companies see the potential. If you think this sounds far-fetched, all you have to do is compare the situation to the history of antibiotics. In the early years of antibiotics, penicillin was king. There wasn't enough research to know exactly which antibiotics worked best against which forms of bacteria, so penicillin was used on all types. As new antibiotics were developed, research showed which ones worked for different strains of bacteria, increasingly specialized antibiotics were developed, and the rest is history.

Once pharmaceutical companies determine which strains of probiotic can be used for what disease, they can then have individual strains of probiotics designated as drugs.

Just remember that you can always have unlimited supplies of "broad-spectrum" probiot-

ics by making and eating your own fermented foods, such as sauerkraut, pickled vegetables, yogurt, kefir, and borscht. As I've said before, you'll be decades ahead of the crowd if you start to routinely include a probiotic supplement and those types of food in your diet now. On a positive note, as more focus is placed on probiotics, maybe there will be less emphasis on eradication therapy and all its associated problems.

Naturally fermented foods are just one example of an age-old remedy that our ancestors used to promote health and extend their lives. Another that has recently received a considerable amount of publicity is green tea. Every day, it seems, I read about another benefit of tea, both the green and black varieties.

I just reviewed the details of a patent granted to Procter and Gamble for a chewing gum that cures bad breath. Unlike most gums, which mask the smell of bad breath, P&G's gum absorbs the chemical compounds responsible for the unpleasant smell. The gum contains a zeolite polymer of aluminum and silicon oxides that traps stinky gases in a crystalline matrix. I guess no one told them that drinking green and black teas gets to the root of the problem and stops the development of bacteria that cause bad breath.

Researchers from the University of Illinois recently reported their findings at the annual meeting of the American Society for Microbiology. Even at low concentrations, compounds in tea called polyphenols stopped the growth of certain bacteria that release gases associated with bad breath. Both green and black teas worked, however black tea appeared to be slightly more effective.

Wash Away Blemishes

A couple of months ago I reported on the effectiveness of an anti-acne product called Pro-Active. For moderate acne problems, topically applied green tea can also be effective.

My contacts in the Philippines recently informed me of a study performed at the Jose R. Reyes Memorial Medical Center in Manila. A 3 percent solution of topical green tea was compared to 4 percent benzoyl peroxide in the treatment of mild to severe acne.

Patients applied either the green tea solution or the benzoyl peroxide twice daily for 12 weeks. Those with moderate to severe

acne began to show improvement after two to four weeks of regular use of green tea. The tea proved to be just as effective as the benzoyl peroxide in these cases. The benzoyl peroxide was more effective, however, in the very mild and the very severe cases.

Acne can be a very frustrating condition to treat. For those with limited funds, topically applying green tea could provide a viable alternative. Just brew a cup of tea, and once it has cooled, the liquid can be dabbed on with cotton balls or applied with a clean wash cloth.

The oral consumption of green tea can also help treat acne problems. Certain compounds in tea are known to modulate both the production and action of male hormones (in both males and females). These are the hormones that can trigger acne, baldness, prostate enlargement, and cancer in the reproductive organs. Green tea and green tea extracts have been shown to help in each of these conditions. (*Hong Kong Med J* 01;7(4):369-74)

A new, unpublished study from the University of Sheffield shows that two compounds in green tea can help prevent osteoarthritis by blocking the enzyme that destroys cartilage. In addition, a report from Australia shows that green tea can help prevent ovarian cancer. After studying more than 900 Chinese patients, researchers found that the risk of ovarian cancer was lower in individuals who drank green tea daily, and even lower in those who had drunk tea for many years. Women who drank green tea daily ran only 39 percent of the risk of non-tea drinkers. And those who had drunk tea for more than 30 years had only 23 percent of the risk of non-tea drinkers. (*Cancer Epidemio Biomarkers Prev* 02;11:713-18)

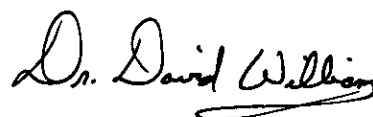
A study performed by Brigham and Women's Hospital and Harvard Medical School found that green tea "primed" the immune system's T-cells to better recognize and stimulate the production of antibodies against tumors, parasites, fungi, and bacteria. In simple terms, regularly drinking green tea makes your immune system more efficient and prepared to fight off future infections. For those who are interested, my Madura Estates green tea kit is available from Mountain Home Nutritionals (800-888-1415) for \$39.99. Mention code 26937E.

Swattingly Sound Solutions

By the time you receive this month's issue, I'll be on a trip to the Far East and then the rainforests of Australia, without a doubt swatting at mosquitoes again.

The incidence of practically every major disease—cancer, diabetes, heart disease, osteoporosis, arthritis, Parkinson's, Alzheimer's, etc.—is increasing. Obviously, something isn't right. The solutions I outline in *Alternatives* every month are usually not complex or a marvel of the latest technology. Instead, most are very simple, relatively inexpensive, and, most importantly, they work. Those are the kind of breakthroughs that keep me traveling the world. They're also the kind of breakthroughs that will help you restore or maintain your health. And, in the long run, that's really what it's all about.

Take Care,



If you have questions or comments for Dr. Williams please send them to the mail or e-mail addresses listed to the right. Of course, practical and ethical constraints prevent him from answering personal medical questions by mail or e-mail, 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
- To share stories about the ways *Alternatives* has helped you, send an e-mail to SuccessStories@drdavidwilliams.com
- To order nutritional supplements from Mountain Home Nutritionals, call 800-888-1415 or visit drdavidwilliams.com
- To order back issues or reports, call 1-800-718-8293
- To sign a friend up for *Alternatives*, call 800-219-8591
- Sign up for free e-mail dispatches at drdavidwilliams.com