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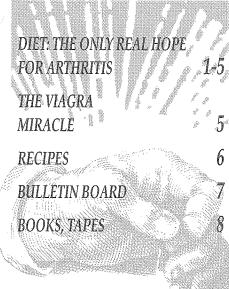
UGALL



NEWSLETTER

MARY & JOHN McDOUGALL

INSIDE





| DIET: THE ONLY REAL HOPE | FOR ARTHRITIS

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MARY

A dentist writes, "In April of 1994 I met you briefly at the Michigan Dental Association Annual Meeting in Grand Rapids. During this seminar, I asked you about my 4-yearold son having juvenile rheumatoid arthritis. Bryan was on 35 mg of prednisone (a powerful steroid) and 1200 mg of Advil daily. He was in so much pain he screamed and cried day and night. In one year he lost weight and did not grow one inch. His blood work reflected a sed rate of over 40 (This is a mea-

Dougall Newsletter

&

JOHN

W I T H

surement of severity of inflammation and should be below 5). The suggestions you gave me that day lead me to remove all animal products from his diet, as well as refined carbohydrates."

"Within six months, we had Bryan off all his medication. He was free of pain, gaining weight and growing again. His last blood work was superb with a sed rate of 1 - can you believe it!"

That's how bad it can get. But for millions arthritis is much more subtle. Marvin Burk (Louise's husband—Louise

works in the McDougall Health Center office) could hardly get out of the chair. Then he would walk straddle-legged halfway across the room until he could loosen up enough to get his joints moving. His hands were so stiff he could not use his tools and he often dropped things. He figured a man of 65 shouldn't be so crippled and decided he'd do whatever it takes to get well. He changed his diet 8 years ago with immediate and dramatic results. Now he pops out of the chair, walks without a bit of stiffness or pain and he handles his tools with no trouble. Many of us can relate to Marvin's troubles.

PEOPLE'S MOST COMMON AFFLICTION

МсDO

Diseases of the muscles and bones are among the most common of all human afflictions, affecting all ages, but becoming more prevalent with years. Government surveys indicate in the United States approximately 33% of adults currently suffer from troublesome arthritis with symptoms of swelling, limitation of motion, or pain. Approximately half of all people over 65 years report having arthritis. The regions of the body most

affected are the neck, lower back, hip and shoulder.

Arthritis means inflammation of a joint—no more, no less. The fact that a person has arthritis tells nothing about the cause or the cure. Joints can be inflamed as a result of an injury, such as from tripping and spraining an ankle. That's called traumatic arthritis. Joints can be infected with bacteria resulting in suppurative arthritis. Uric acid crystals can accumulate in the joints causing gouty arthritis. The causes of all three of these forms of arthritis are known and once the causes are stopped the joints heal.

Unfortunately, most forms of arthritis are said by doctors to have "no known cause." And whether or not they will admit it, there is no cure to be found in modern drug therapy either.

DEGENERATIVE AND INFLAMMATORY

Arthritis of "no known cause" can be divided into two broad categories: *degenerative arthritis and inflammatory arthritis*. Degenerative arthritis most commonly represents a condition known as *osteoarthritis*. This is the most common arthritis found in people living in Western civilizations—seen in x-rays of the hands of over 70% of people 65 years and older. However, this same disease Arthritis is not a genetic disease, nor is it an inevitable part of growing older-there are causes for these joint afflictions, and they lie in our environment-our closest contact with our environment is our food.

is comparatively rare in African and Asian countries, where people physically labor to survive (*Br J Rheumatol* 24:321, 1985). How can that be? Osteoarthritis is said to be due to wear and tear on the joints, so why is it less common among hard working people of underdeveloped countries? Nor does it explain why with light use, the hands of women often become twisted and deformed with age.

The inflammatory forms of arthritis include *juvenile rheumatoid arthritis, rheumatoid arthritis, psoriatic arthritis, lupus, and ankylosing spondylitis.* These aggressive diseases affect less than 5% of the people living in the United States today. Classifying these inflammatory diseases by different names, such as rheumatoid or lupus provides no further benefits to the patient, because it does not lead to better understanding of the cause of the inflammation, or to the successful treatment of the disease.

People diagnosed with degenerative arthritis (osteoarthritis) have inflammation in their joints in addition to the long-standing damage (degeneration). This inflammation can often be stopped with a change in diet and the swelling, pain, and stiffness relieved. What won't change in either form of arthritis is the permanent destruction left by years of disease, often leaving deformity, stiffness and pain. To understand how most people with arthritis can be helped by a healthy diet, I will focus on the more aggressive inflammatory forms of arthritis.

HOPE FOR ARTHRITIS SUFFERERS

Arthritis is not a genetic disease, nor is it an inevitable part of growing older—there are causes for these joint afflictions, and they lie in our environment—our closest contact with our environment is our food. Some researchers believe rheumatoid arthritis did not exist anywhere in the world before 1800 (*Arthritis Rheum* 34:248, 1991). It is well documented that these forms of arthritis were once rare to nonexistent in rural populations of Asia and Africa (*Chung Hua Nei Ko Tsa Chih* 34:79, 1995; *Arthritis Rheum* 34:248, 1991). As recently as 1957, no case of rheumatoid arthritis could be found in Africa. That was a time when people in Africa followed diets based on grains and vegetables.

These once unknown joint diseases are now becoming common as people migrate to wealthier nations or move to the big cities in their native countries. With these changes they abandoned their traditional diets of grains and vegetables for meat, dairy products, and highly processed foods (*J Rheumatol* 19:2, 1992; *Ann Rheum Dis* 49:400, 1991). For example, although unknown in Africa before 1960, African-Americans lead in the incidence of lupus in the US (*J Am Med Women's Assoc* 53:9(1998). The mechanisms by which an unhealthy diet causes inflammatory arthritis are complex and poorly understood, but involve our intestine and immune system.

INTESTINE AND IMMUNE SYSTEM

Increased Intestional Permeability

The intestine forms an effective barrier to separate and exclude intestinal contents from the interior of the body. Only a single layer separates the individual from enormous amounts of antigens (foreign proteins) both of dietary and microbial origin. The intestinal mucosa absorbs and digests nutrients, turning large complex molecules into small simple ones. Normally, only the small molecules are allowed to pass through the intestinal wall, while the large ones that can act as antigens, causing immune reactions, have a limited ability to pass through. Infections and toxins can cause gaps in this barrier and allow large molecules to pass into the blood. This condition of increased intestional permeability is referred to as a "leaky gut." Patients with inflammatory arthritis have been shown to have inflammation of the intestinal tract resulting in increased permeability (Baillieres Clin Rheumatol 10:147, 1996).

The largest amount of lymphoid tissue in the body is associated with the gut. This tissue protects the body from antigens that do get through the intestinal barrier. Unfortunately, an unhealthy diet—too high in fat, cholesterol, and animal protein—can compromise the capacities of the lymphoid tissue to destroy invading antigens that make it through the intestional wall.

Fasting is known to decrease intestinal permeability, thus making the gut "less leaky." This may be one of the reasons fasting has been

shown to dramatically benefit patients with rheumatoid arthritis (Scand J Rheumatol 11:33,1982). When patients return after the fast to a diet with dairy products, the gut becomes more permeable and the arthritis returns. An unhealthy diet containing dairy and other animal products causes inflammation of the intestinal surfaces and thereby increases the passage of dietary and/or bacterial antigens (Br J Rheumatol 33:638, 1994). A vegan diet (one with no animal products) has been found to change the fecal microbial flora in rheumatoid arthritis patients, and these changes in the fecal flora are associated with improvement in the arthritis activity (Br J Rheumatol 36:64, 1997).

In addition to being devoid of animal products, the diet needs to be very low in fat for maximum benefits. Dietary fat has a toxic effect on the intestine of experimental animals, causing injury that increases the permeability of the gut allowing more antigens to enter the body (*Pediatr Res* 33:543, 1993). Feeding high cholesterol diets to young animals also increases their "leaky gut" (*J Pediatr Gastroenterol Nutr* 9:98, 1989; *Pediatr Res* 21:347, 1987). Those vegan diets that have failed to help arthritis patients have been high in vegetable oils, which are know to damage intestional integrity.

One dangerous paradox in arthritis treatment is that the drugs most commonly used to treat arthritis are toxins to this intestinal barrier. All commonly used nonsteroidal antiinflammatory drugs (like Advil, Motrin, Naprosyn, etc.), apart from aspirin and nabumetone (Relafen), are associated with increased intestinal permeability in man. While reversible in the short term, it may take months to improve the barrier following prolonged use. (*Baillieres Clin Rheumatol* 10:165, 1996).

Foreign Protein in the Body

Through the "leaky gut" pass foreign proteins from foods and bacteria into the blood stream. The food proteins are recognized by the body as "not self,"— as something harmful, just like it recognizes the proteins of viruses, parasites, and bacteria as foreign. Then it makes antibodies against these invaders. Elevated levels of antibodies to gut bacteria and to food have been found in various forms of inflammatory arthritis (*Rheumatol Int* 17:11,1997; *Clin Chim Acta* 203:153, 1991).

Antigen-Antibody Complexes

A "leaky gut" can lead to the formation of large complexes, made up of antibodies and the foreign protein (antigens) in the blood (*Curr Opin Rheumatol* 10:58, 1998; *Ann Prog Clin Immunol* 4:63, 1980). The healthy body has mechanisms that easily remove these large complexes from the blood. In some people, however, these complexes survive—because they are formed too rapidly for complete removal and/or the removal mechanisms are insufficient to handle the load. The persistent complexes are then filtered out by the smallest capillaries of the body which are found in the joints, skin, and kidneys. Stuck in the capillaries, these complexes cause an inflammatory reaction, like a sliver of wood stuck in the skin.

Molecular Mimicry

Another fate of the foreign proteins is they can cause the body to make antibodies that are not solely specific to that foreign protein, but also interact with similar human proteins. This mechanism is known as *molecular mimicry*. The body attacks itself and the resulting diseases are referred to as *autoimmune diseases*. Rheumatoid arthritis, lupus, psoriatic arthritis, ankylosing spondylitis, and the other inflammatory forms of arthritis are autoimmune diseases.

Molecular mimicry in rheumatoid arthritis has been identified with cow's milk. One analysis showed that the amino acid residues 141-157 of bovine albumin were essentially the same as the amino acids found in human collagen in the joints (*Clin Chim Acta* 203:153, 1991). The antibodies synthesized to attack the foreign cow's milk proteins end up attacking the joint tissues because of shared sequences of amino acids between the cartilage and the milk proteins that the antibody is directed to attack.

The Defense System

A healthy diet allows the defense system to work to its full capacity removing antigens that enter the system and removing immunecomplexes from the blood. Components of the rich American diet are known to impair its function. Vegetable oils, including those of the omega-3 and omega-6 variety, are particularly strong suppressors of the immune system. This immune suppressing quality of oils (for example, fish oil and primrose oil) has been used to suppress the pain and inflammation of arthritis, but like too many drug therapies the ultimate outcome may not be best for the patient. Suppression of the immune system prevents it from doing its work of removing invading foreign proteins. Low-fat diets have been shown to retard the development of autoimmune diseases, similar to lupus and rheumatoid arthritis, in experimental animals (Ann Rheum Dis 48:765, 1989).

A healthy diet also supplies antioxidants and other phytochemicals that keep the joints strong and repair damage (*Am J Clin Nutr* 53(1 Suppl):362S, 1991). Animal studies have shown that the foods consumed on the rich American diet fail to provide adequate antiox-

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idants to destroy the damaging free radicals that form in the joint tissues (*J Orthop Res* 8:731, 1990).

DIETS CAN CURE: THE RESEARCH

Treatment of arthritis with diet became fashionable in the 1920s and many studies over the last 20 years have shown a healthy diet, one very different from the typical American diet, can be a very effective treatment of inflammatory arthritis for many people.

• In 1979, Skoldstam fasted 16 patients with rheumatoid arthritis for 7-10 days with a fruitand vegetable juice fast, followed by a lactovegetarian diet for 9 weeks. One-third of the patients improved during the fast, but all deteriorated when the milk products were reintroduced (a lactovegetarian diet) (*Scan J Rheumatol* 8:249, 1979).

• In 1980, Hicklin reported clinical improvement in 24 of 72 rheumatoid patients on an exclusion diet. Food sensitivities were reported to: grains in 14, milk in 4, nuts in 8, beef in 4, cheese in 7, eggs in 5, and one each to chicken, fish, potato, and liver (*Clin Allergy* 10:463, 1980).

• In 1980, Stroud reported on 44 patients with rheumatoid arthritis treated with the elimination of food and chemical avoidance. They were then challenged with foods. Wheat, corn, and beef were the greatest offenders (*Clin Res* 28:791A, 1980).

• In 1981, Parke described a 38-year-old mother with 11-years of progressive erosive seronegative rheumatoid arthritis who recovered from her disease, attaining full mobility, by stopping all dairy products. She was then hospitalized and challenged with 3 pounds of cheese and seven pints of milk over 3 days. Within 24 hours there was a pronounced deterioration of the patient's arthritis (*BMJ* 282:2027, 1981).

• In 1981, Lucas found a fat-free diet produced complete remission in 6 patients with rheumatoid arthritis. Remission was lost within 24-72 hours of eating a high-fat meal, such as one containing chicken, cheese, saf-flower oil, beef, or coconut oil. The authors concluded, "...dietary fats in amounts normally eaten in the American diet cause the inflammatory joint changes seen in rheumatoid arthritis." (*Clin Res* 29:754, 1981).

• In 1982 Sundqvist studied the influence of fasting with 3 liters of fruit and vegetable juice daily and lactovegetarian diet on intestinal permeability in 5 patients with rheumatoid arthritis. Intestinal permeability decreased after fasting, but increased again during a subsequent lactovegetarian diet regime (dairy products and vegetables). Concomitantly it appeared that disease activity first decreased and then increased again. The authors conclude, "The results indicate that, unlike a lactovegetarian diet, fasting may ameliorate the disease activity and reduce both the intestinal and the non-intestinal permeability in rheumatoid arthritis." (Scand J Rheumatol 11:33, 1982.)

• In 1983, Lithell studied twenty patients with arthritis and various skin diseases on a metabolic ward during a 2-week period of modified fast on vegetarian broth and drinks, followed by a 3-week period of a vegan diet (no animal products). During fasting, joint pains were less intense in many subjects. In some types of skin diseases (pustulosis palmaris et plantaris and atopic eczema) an improvement could be demonstrated during the fast. During the vegan diet, both signs and symptoms returned in most patients, with the exception of some patients with psoriasis who experienced an improvement. The vegan diet was very high-fat (42% fat). (Acta Derm Venereol 63:397, 1983).

• In 1984 Kroker described 43 patients from three hospital centers who underwent a 1-week water fast, and overall the group improved significantly during the fast. In 31 patients evaluated, 25 had "fair" to "excellent" responses and 6 had "poor" responses. Those with more advanced arthritis had the poor responses. (*Clin Ecol* 2:137, 1984).

• In 1985, Ratner removed all dairy products from the diet of patients with seronegative rheumatoid arthritis, 7 out of 23 went into remission when switched to milk-free diets (*Isr J Med Sci* 21:532, 1985).

• In 1986, Panush described a challenge of milk in a 52-year-old white woman with 11 years of active disease with exacerbations allegedly associated with meat, milk, and beans. After fasting (3 days) or taking Vivonex (2 days) there was no morning stiffness or swollen joints. Challenges with cow's milk (blinded in a capsule) brought all of her pain, swelling and stiffness back (*Arthritis Rheum* 29:220, 1986).

• In 1986, Darlington published a 6-week, placebo-controlled, single-blinded study on 48 patients. Forty-one patients identified foods producing symptoms. Cereal foods, such as corn and wheat gave symptoms in more than 50% of patients (*Lancet* 1:236, 1986).

• In 1986, Hanglow performed a study of the comparison of the arthritis-inducing properties of cow's milk, egg protein and soy milk in experimental animals. The 12-week cow's milk feeding regimen produced the highest incidence of significant joint lesions. Egg protein was less arthritis-inducing than cow's milk, and soy milk caused no reaction. (*Int Arch Allergy Appl Immunol* 80:192, 1986).

• In 1987, Wojtulewski reported on 41 patients with rheumatoid arthritis treated with a 4-week elimination diet. Twenty-three improved. (*Food allergy and intolerance*. London: *Bailliere Tindall* 723, 1987).

• In 1988, Beri put 14 patients with rheumatoid arthritis on a diet free from pulses, cereals, milk, and non-vegetarian protein foods. Ten (71%) showed significant clinical improvement. Only three patients (11%) adhered to the diet for a period of 10 months (*Ann Rheum Dis* 47:69, 1988.)

• In 1988, Hafstrom fasted 14 patients with water only for one week. During fasting the duration of morning stiffness, and number and size of swollen joints decreased in all 14 patients. No adverse effects of fasting were seen except transient weakness and lightheadedness. The authors consider fasting as one possible way to induce rapid improvement in rheumatoid arthritis (*Arthritis Rheum* 31:585, 1988).

• In 1991, Kjeldsen-Kragh put 27 patients on a modified fast with vegetable broths, followed by a vegan diet, and then a lacto-ovovegetarian diet. Significant improvement occurred in objective and subjective parameters of their disease (Lancet 2:899, 1991) A two-year follow-up examination found all diet responders but only half of the diet nonresponders still following the diet, further indicating that a group of patients with rheumatoid arthritis benefit from dietary manipulations and that the improvement can be sustained through a two-year period (*Clin Rheumatol* 13:475, 1994.) Patients dropping out with arthritic flares in the diet group left the study mainly when the lactovegetarian diet (dairy products) were introduced (Lancet 338:1209, 1991).

• In 1991, Darlington reported on 100 patients who had undergone dietary manipulation therapy in the past decade, one-third were still well and controlled on diet alone without any medication up to 7½ years after starting the diet treatment. They found most patients reacted to cereals and dairy products (*Lancet* 338:1209, 1991).

• In 1991, Skoldstam fasted 15 patients for 7 to 10 days. Almost all of the patients showed remarkable improvement. Many patients felt the return of pain and stiffness on the day after returning to their "normal" eating and all benefit was lost after a week (*Rheum Dis Clin North Am* 17:363, 1991).

• In 1992, Sheignalet reported on 46 adults with rheumatoid arthritis who eliminated dairy products and cereals. Thirty-six patients (78%) responded favorably with 17 clearly improved, and 19 in complete remission for one to five years. Eight of those 19 stopped all medications with no relapse. Favorable benefits appeared before the end of the third month in 32 of the patients (*Lancet* 339:68, 1992).

• In 1992, van de Laar showed benefits of a hypoallergenic, artificial diet in six rheumatoid patients. Placebo controlled rechallenges showed intolerance for specific foodstuffs in four patients. In two patients, biopsy of the joints showed specific (IgE) antibodies to certain foods (*Ann Rheum Dis* 51:303, 1992).

• In 1992, Shigemasa reported a 16-year-old girl with lupus who changed to a pure vegetarian diet (no animal foods) and stopped her steroids without her doctor's permission. After starting the diet her antibody titers (a reflection of disease activity) fell to normal and her kidney disease improved (*Lancet* 339:1177, 1992).

• In 1995, Kavanaghi showed an elemental diet (which is an hypoallergenic protein-free artificial diet consisting of essential amino acids, glucose, trace elements and vitamins) when given to 24 patients with rheumatoid arthritis improved their strength and arthritic symptoms. Reintroduction of food brought the old symptoms back (*Br J Rheumatol* 34:270, 1995).

• In 1998, Nenonen tested the effects of an uncooked vegan diet, rich in lactobacilli, in rheumatoid patients randomized into diet and control groups. The intervention group experienced subjective relief of rheumatic symptoms during intervention. A return to an omnivorous diet aggravated symptoms. The results showed that an uncooked vegan diet, rich in lactobacilli, decreased subjective symptoms of rheumatoid arthritis (*Br J Rheumatol* 37:274, 1998).

IT'S THE WHOLE DIET

The importance of the overall diet cannot be overemphasized. Proper foods keep the intestinal barriers strong and the immune system in a fighting condition. Those foods are whole starches, vegetable, and fruits. In addition to being free of animal products, the diet must be low in fat of all kinds—vegetable oil (even olive oil, corn, safflower, and flaxseed oil) and animal fat. When it comes to blaming individual foods, dairy products seem to be the most troublesome foods, causing the most common and severe reactions. Many reports indicate grains, such as corn and wheat can also aggravate of symptoms. The truth seems to be almost any food can cause trouble, but few people react to vegetable foods.

My experience and this research has lead me to prescribe for the past 22 years a starchbased diet with the addition of fruits, and vegetables (low-fat and devoid of all animal products). If no improvement is seen within 2 weeks, I suggest wheat and corn be eliminated. The final step is to follow an elimination diet based on the foods least likely to cause problems, such as sweet potatoes and brown rice with the addition of noncitrus fruits, and green and yellow vegetables. All thoroughly cooked. Water is the beverage. If improvement is found (usually within 1 to 2 weeks), then foods are added back one at a time to see if there is an adverse reaction. (A complete description of this diet can be found in the McDougall Program—12 days to Dynamic *Health*). Nonsteroidal antiinflammatory drugs should be stopped, and if necessary, replaced by aspirin or nabumetone (Relafen). Other medications are reduced and/or discontinued as the symptoms improve.

I have just finished a study on 28 patients with rheumatoid arthritis using the **McDougall Diet** (with corn and wheat included) and the results were remarkable. Full publication will appear this fall.

FOR WHOLE BODY BENEFITS

By no small coincidence the same diet that keeps the joints healthy also keeps the rest of the body sound. Diane of Walnut Creek wrote to me last year. "I had what I can only call a miserable life until about five years ago. Nothing seemed to go right for me. In late 1991 I was diagnosed with spinal stenosis and degenerative arthritis. I was declared permanently disabled and left my job as a daily newspaper journalist. My therapist gave me a wonderful gift-she suggested I try your program. I shrugged off her suggestion at first. I swore that I ate well anyway: only dairy and shellfish and white meats. Only! She did not push the point, wisely waiting for me to think about the idea. I did wait for two years. Then two years ago she suggested your program again. I told her I didn't believe it would work, but agreed to try it for two months. I was overweight, very overweight, by 100 pounds, most of my life-carrying all that poundage caused a lot of wear on my joints. That was two years ago, and I'm a lifelong convert."

"Of course what you predicted happened:

My migraines went away completely; I stopped swelling in my joints; I could sleep easily; I had no indigestion problems of any kind; and I began to drop weight. As you probably know, it was a lot easier than I thought it would be. Before I started the McDougall Plan, I was losing weight slowly. Afterward, the weight loss was dramatic. After about six months, people started noticing and commenting. They kept saying things like 'you look ten years younger,' or most often, 'You look great. What did you do?' I no longer take the anti-inflammatory drugs and painkillers that I was taking before the McDougall way. My knee and low-back are virtually pain-free. Now, what I've found is that nobody believes it can be as simple as eating carefully and exercising. They all want some magic or some pill."

RESEARCH

THE VIAGRA MIRACLE

Oral Sildenafil in the Treatment of Erectile Dysfunction by Irwin Goldstein in the May 14, 1998 issue of the *New England Journal of Medicine* reported on an effective, reliable, simple to use, relatively safe, noninvasive, discreetly-administered drug to treat erectile dysfunction (impotence) (338:1397). Part one of the study was a 24-week trial of 532 men who took placebo or various doses of Viagra (sildenafil)—25 mg, 50 mg, or 100 mg. The greater the dose the better the results. After 24 weeks of treatment, improved erections were reported by 56%, 77%, and 84% of men taking increasing doses of Viagra compared to 25 percent with the placebo.

The second part of the study was a 12-week trial in which 329 men could increase their dose of Viagra or placebo on their own initiative. Of the men taking Viagra, 101 of the 136 reported improved erections compared to 23 of the 118 in the placebo group. This resulted in quadrupling the success of sexual intercourse. Benefits were seen in men diagnosed with many different sources of erectile dysfunction, including those classified as organic, like atherosclerosis, diabetes, hypertension, and history of radical prostatectomy, and those classified psychogenic, due to mental problems.

The most frequent side effect was headache, followed by flushing, dyspepsia (indigestion), and visual disturbances. No man had priapism (persistent erection not due to sexual arousal, accompanied by pain and tenderness).

The study was funded by Pfizer, the manufacturer.

COMMENT: (From a man's perspective, of

course). Impotence is defined as the consistent inability to achieve or sustain an erection of sufficient rigidity for sexual intercourse. This excludes problems of libido, ejaculation, orgasm, and fertility. It is estimated that 10 million American men are impotent. It is agedependent with about 2 percent at age 40 and 25 percent at 65 years of age. With disease, the numbers are higher; for example, 35 to 50 percent of diabetics are impotent. The most common cause of impotence is occulusion of the arteries to the penis, and arteries to the nerves that supply the penis, with atheroscle-Medications such as antacids rosis. (Tagamet), antidepressant and antipsychotic drugs also cause impotence; however, blood pressure pills are the most common offenders.

Before looking to Viagra for help (at \$8 to \$10 a pill) consider other things you might do to improve your performance. Begin by becoming healthy with diet and exercise. This will benefit you in several ways: your circulation will improve, you'll get off medications that make you impotent, and you'll look better to yourself and others. Improve communication and relations with your sexual partner. Yohimbine (Yocon) is an herb made from the bark of a tree growing in East Africa. It is so effective that drug companies have packaged it into pills that your doctor can prescribe. It is taken three times a day and effects are usually seen in 2 to 3 weeks.

If you do take Viagra, a healthy diet will even have benefits for the medication. Peak concentrations of Viagra occur in the blood in about an hour. A fatty meal, however, will delay the peak by about an hour and decrease the peak concentrations (*Br J Clin Pharmacol* 42:268P, 1996).

Viagra has obvious advantages over previously used approaches, such as psychological counseling, suction pumps, penile injections, insertion of tablets into the urethra, and surgical implantation of pumps, balloons, and plastic rods. No wonder it has been hailed as a wonder drug by men. The first week Viagra was on the market I had requests from 3 men in the McDougall Program at St. Helena for a prescription (there were only 5 men in that program). Patients picked up 906,368 new prescriptions for Viagra from April 3 through May 8, 1998. On the Internet you can place your order for the drug, but it won't be filled until the doctor's prescription arrives.

Viagra was discovered by researchers looking for a new kind of blood pressure pill. The medication was ineffective for lowering blood pressure, but none of the men returned the pills. Viagra works by enhancing changes in blood flow in the penis that normally occur to cause an erection. Tactile, visual, auditory, and imaginative stimuli cause an increased flow of blood into the penis, and close the flow out of the penis. The result is two large blood-filled sacks, the corpora cavernosa, become engorged with blood and the penis stands erect. Viagra enhances the build up of a specific substance (cyclic guanosine monophosphate-specific phosphodiesterase) that is released during arousal, and mediates the desired changes in blood flow. Because its mode of action only enhances something that normally occurs, an erection only happens with sexual stimulation. Because of this, only men with a normal level of sexual desire would be expected to be helped. Side effects, too, are due to the build up of this same substance in other parts of the body.

The only other human study on Viagra was published in the British Journal of Urology in August of 1996 (78:257). Twelve patients (aged 36-63 years) with erectile dysfunction of no established organic cause were studied. Measurement of penile rigidity was made during visual sexual stimulation at different doses of Viagra or placebo. Duration of rigidity of the penis was 1.3 min in patients on placebo, 3.5 min on 10 mg, 8.0 min on 25 mg, and 11.2 min on 50 mg of Viagra. Ten of 12 patients reported improved erectile activity while receiving Viagra, compared with two of 12 on placebo (P = 0.018). Six patients on active treatment and five on placebo reported mild and transient adverse effects which included headache, dyspepsia and pelvic musculo-skeletal pain.

Since there is so little reported research on Viagra many questions still have to be answered. Are there other short term and long term side effects yet to be discovered? Pfizer reported on May 22, 1998 to the Food and Drug Administration six deaths among Viagra patients. It's too early to say if Viagra played any role. People with erectile dysfunction are older and tend to frequently suffer from serious underlying health conditions, such as diabetes or cardiovascular disease, so you would expect a higher risk of deaths.

Patients who are taking nitroglycerin or other nitrates should not take Viagra, because both dilate blood vessels, the combination increasing the risk of death. Tagamet, erythromycin, Nizoral, Sporanox, Posicor increase the concentrations of the drug in the blood and Rifampin decreases effects.

Other outstanding questions are: Will it enhance the sexual performance for men without erectile dysfunction? Will women receive similar benefits with their sexual performance? Should insurance companies pay for this medication to treat this recognized medical condition, which is not only the most common, but also the most threatening, distressing, and embarrassing sexual problem for men?

SANTA FE RICE SALAD

Servings: 4

Preparation Time: 10 minutes (need cooked rice)

- $2\frac{1}{2}$ cups cooked brown rice
- 1 15 ounce can black beans, drained and rinsed
- 1 cup frozen corn kernels, thawed
- 1 tomato, chopped
- 4 green onions, chopped
- 2 tablespoons chopped cilantro

¹∕₂ cup salsa

¹/₄ cup fat-free or Tofu mayonnaise (see New McDougall Cookbook or Quick and Easy Cookbook)

Place the rice, beans, corn, tomato, green onions and cilantro in a bowl and mix well. Combine the salsa and mayonnaise and pour over salad. Toss well to mix. Serve at once or refrigerate until serving time.

PINEAPPLE RICE SALAD

Servings: 6-8

Preparation Time: 20 minutes (need cooked rice)

Chilling Time: 1-2 hours

4 cups cooked brown rice

- 1 6 ounce bag baby spinach, chopped
- 1 bunch green onions, chopped
- 1 20 ounce can pineapple chunks, drained
- 1/2 pound fresh mushrooms, sliced
- 1 cup oil free dijon-style dressing
- 3 tablespoons soy sauce
- ½ teaspoon dill weed
- fresh ground pepper to taste

Place the cooked rice in a bowl. Add spinach, green onions, pineapple and mushrooms. Mix well.

Combine the dressing, soy sauce and dill weed in a jar and mix well. Pour over salad and toss well to mix. Season with pepper. Chill 1-2 hours before serving.

LASAGNA

Servings: 12-15 Preparation Time: 30 minutes Cooking Time: 60 minutes Resting Time: 10 minutes

1 16 ounce package lasagna noodles

- 4 26 ounce jars fat free pasta sauce
- 2 12 ounce packages Low Fat Nigari Tofu
- 1 teaspoon onion powder
- 1/4 teaspoon garlic powder
- 1 10 ounce package frozen, chopped spinach, thawed and squeezed dry
- 1 16 ounce package fat free soy mozzarella cheese, thinly sliced
- soy parmesan cheese (optional)



Preheat oven to 350 degrees.

Crumble the tofu into a bowl. Mix in onion and garlic powder. Stir in spinach and mix well.

Pour 1 jar of the pasta sauce in the bottom of a deep 11 $\frac{1}{2}$ x 14 inch baking dish. Lay 6 of the uncooked lasagna noodles over the sauce. Take $\frac{1}{2}$ of the tofu mixture and spread it over the noodles, then pour another jar of the pasta sauce over the tofu mixture and spread to cover well. Lay $\frac{1}{2}$ of the sliced soy cheese over the sauce, then follow with another layer of noodles, tofu mixture, sauce and soy cheese. Finish with a layer of noodles, another jar of sauce and sprinkle with soy parmesan cheese, if desired. Cover with parchment paper and then cover tightly with foil. Bake for 60 minutes. Remove from oven, uncover and let rest for 10 minutes before serving.

Hint: This makes a large amount. It freezes well after baking so you may want to make it in 2 pans and save one for later use. The recipe can easily be cut it half to make a smaller amount. Use your favorite brand of fat free pasta sauce, egg-free lasagna noodles, soy cheese and fresh tofu. Do not use aseptically packaged tofu in this recipe.

THAI CURRIED RICE

Servings: 4-6

Preparation Time: 20 minutes (need cooked rice)

Cooking Time: 12-13 minutes

- ⅓ cup water
- 1 onion, chopped
- 1 red pepper, chopped
- 1 yellow pepper, chopped
- ¹/₂ teaspoon minced fresh garlic
- 1-2 tablespoons green curry paste
- 2 cups chopped Napa cabbage
- 1 cup small broccoli florets
- 1 bunch green onions, chopped
- ¹/₂ cup soy sauce
- 4 cups cooked brown rice

1 tomato, chopped 1 cup mung beans sprouts 1 tablespoon chopped fresh basil 1 tablespoon chopped fresh cilantro

Place the water, onion, bell peppers and garlic in a pot. Cook, stirring occasionally, for 5 minutes. Stir in curry paste. Add cabbage, broccoli, green onions and soy sauce. Mix well, cover and cook over medium heat for 5 minutes. Add remaining ingredients and cook until heated through, about 2-3 minutes.

Hint: If you don't like spicy foods, use the lesser amount of curry paste. In our family we like to use 2 tablespoons of the curry paste, and I know people who like really spicy foods that use 3 tablespoons. Green curry paste is sold in Asian markets and at Trader Joe's.

CHILI STUFFED BELL PEPPERS

Preparation Time: 15 minutes Cooking Time: 40 minutes Servings: 4-6

4 medium bell peppers, halved lengthwise, seeds and membranes removed
2 tablespoons water
1½ cups reconstituted TVP
1 teaspoon chili powder
½ teaspoon ground cinnamon

½ cup quick cooking barley 1½ cups tomato salsa (mild, medium or hot)

172 cups tomuto suisa (mita, meatum or no 1 cup water

¹/₄ cup raisins

Heat broiler.

Place peppers cut side down on nonstick baking sheet. Broil 4 inches from heat for 4 minutes. Turn over and broil for an additional 4 minutes. Remove from broiler and set aside. Set oven to 375 degrees.

Meanwhile, place the 2 Tbsp. of water, TVP, chili powder and cinnamon in a nonstick frying pan. Stir until well mixed. Add remaining ingredients, mix well, bring to a boil, reduce heat and cook for 15 minutes. Spoon into pepper halves on baking sheet. Cover with parchment paper, then cover with foil. Bake for 25 minutes.

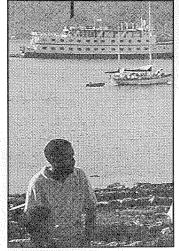
Hint: Use dried textured vegetable protein reconstituted in water. Or use thawed Morningstar Farms Ground Meatless or Green Giant Harvest Burgers For Recipes in this recipe.



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'98 Cruise to panama



Panama Itinerary

On board are naturalists, who will provide briefings each evening about the next day's activities. Each day they will guide small groups of us, describing the local fauna and flora. Lectures (optional) will be given by John and Mary McDougall during the trip. We will have our physical trainer, Jack Dixon, along to help you develop a better exercise program. The itinerary will be similar to that described below. All activities are included in the trip.

Saturday (Day 1): We will all arrive from various destinations to Panama City's International Airport late afternoon or evening and be transported from the airport by bus to the ship, located in Colon Harbor on the Caribbean side. We will cruise that night.

Sunday (Day 2): We visit two villages— Wichubwala and Lanu Nega—on the San Blas Islands. Native Indians perform dances and music, and the children pose with costumes and native parrots. They have a colorful art form known as molas. The mola cloth with unique patterns is made into dresses, tapestries, and purses. We finish the day with scuba diving and snorkeling off Dog Island. Snorkelers swim over a coral covered shipwreck teaming with squid, fish, and invertebrates. Scuba divers swim through breathtaking coral forests on a wall dive.

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Monday (*Day* 3): In the morning we take the dinghies up the Rio Azucar to a river that leads to 3 burial sites for the native Indians. After about an hour of river scenery filled with plants, birds, reptiles, and animals of the rain forest we leave the boat for a very easy hike a half mile back into the jungle. Here we will see a great variety of plants, insects, and birds. Midday we will have a picnic on a remote Island in the Hollandaise Cayes, and finish the day with some of the best snorkeling and

scuba diving in the Caribbean.

Tuesday (Day 4): In the morning we will visit Isla Grande, where there is an early morning bird watching tour to lighthouse point. In the afternoon we visit Portobelo, a beautiful Caribbean bay surrounded by Spanish forts once used to defend the area from pirates. The pirates eventually won. The hike to the first fort is easy, but to get to the highest fort takes almost an hour of strenuous uphill walking. It's worth the hike. Late afternoon there is a guided stroll through the town of Portobelo. This day is finished by island dancers telling stories of the Spanish conquest of the natives.

Wednesday (Day 5): We transit the Panama Canal. Accompanying us is a Panama Canal Commission guide, who answers questions and provides a narration during the 8 to 10 hour trip up three locks to the Gatun Lake then down three locks to the Pacific Ocean. On the Pacific side we will visit Tabago Island. There we will stroll through the clean quaint town of Tabago, and swim and kayak in the bay. Above the town is very interesting nature hike—don't miss it. We're likely to see tarantulas, poison dart frogs, stick beetles, and many different birds and plants.

Thursday (Day 6): We visit Darien on the southwest Pacific coast. From the ship we take outboard motor powered dugout canoes up a river to a primitive village. Well nourished, beautiful little children walk us to their village where we will have an opportunity to observe firsthand their simple homes built on stilts and some of their simple ways of life. Native dances and music are performed by the villagers. High quality arts and crafts are available. In the afternoon we will go to Osprey beach for sunbathing, relaxing, and water sports, including banana boat rides, kayaking, and swimming.

Friday (Day 7): We cruise to a bay on the Isla San Jose. There is a nature observation tour of the island. In the afternoon we visit Contadora Island where many of the wealthy Panamanians have their weekend homes. There are beach activities, such as kayaking, and swimming, and a trip to Pachequita Island for bird watching. In the evening is the dance contest.

Saturday (Day 8): We will disembark and take a $\frac{1}{2}$ hour bus ride back to Panama City International Airport for our airport departure.

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- Pictures of the Costa Rica & Panama trips with information about upcoming cruises
- Dr. McDougall's appearances nationwide
- Information on the cause and cure of common diseases
- An introduction to each current newsletter
- Information about St. Helena Hospital Programs and Right Foods

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Health Shows

There are 2 more free health shows this year that offer an opportunity to see some of the leaders in the field. Call (800) 226-0323 for free tickets. Tell them you are my patient or a McDougall Newsletter subscriber.

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Visit us on the Web at http://www.drmcdougall.com Our website has all the latest news on McDougall events : classes, trips, as well as McDougall educational materials.

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