

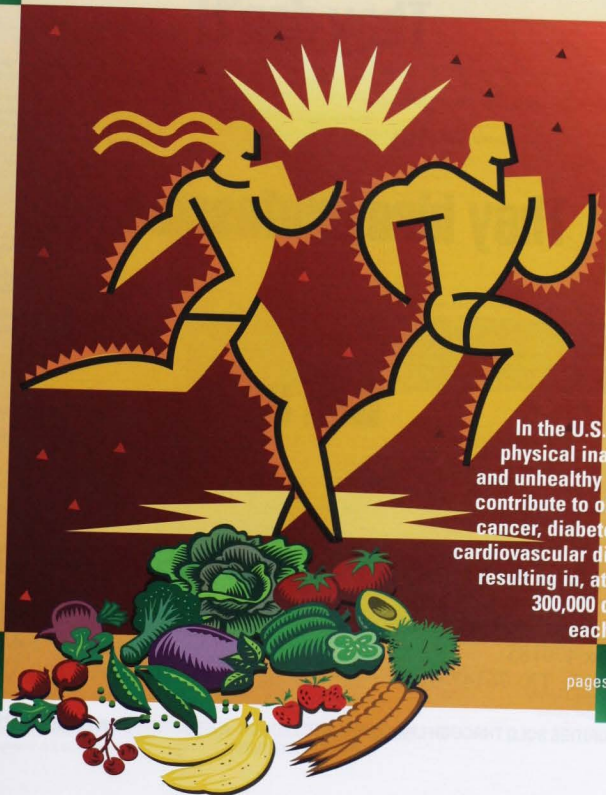
TEXAS D.O.

The Journal of the Texas Osteopathic Medical Association

Volume LIX, No. 6

June 2002

How Important Are Nutrition and Exercise?



In the U.S. today, physical inactivity and unhealthy eating contribute to obesity, cancer, diabetes and cardiovascular disease resulting in, at least, 300,000 deaths each year.

pages 6 - 18

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CALENDAR OF EVENTS

JUNE 26 – 30

"22nd Annual Stanley E. Weiss, D.O. Primary Care Update"

Sponsored by the University of North Texas Health Science Center at Fort Worth

Location: Sheraton South Padre Island Resort
South Padre Island, Texas

CME: 24 hours category 1-A credits anticipated
Contact: UNTHSC Office of CME at 817-735-2539
or 800-987-2CME or <www.hsc.unt.edu>

JULY 19 – 21

"AOA House of Delegates Meeting"

Location: Fairmont Hotel, Chicago, IL

Contact: Ann M. Wittner, AOA
800-621-1773, ext. 8013; 312-202-8013
awittner@aoa-net.org

AUGUST 1 – 4

"TxACOPP 45th Annual Clinical Seminar"

Sponsored by the Texas Society of the American College of Osteopathic Family Physicians

Location: Wyndham Arlington Hotel, Arlington, TX
CME: 25 hours category 1-A credits anticipated
Contact: TxACOPP, 888-892-2637

AUGUST 17 – 18

"OMT – Ligamentous Articular Strain Techniques for Treating the Rest of the Body - Sutherland's Methods"

Presented by the Dallas Osteopathic Study Group

Location: Doubletree Hotel Campbell Centre, Dallas, TX
CME: 16 hours category 1-A credits anticipated
Contact: Conrad Speece, D.O., Course Director
214-321-2673

SEPTEMBER 14 – 15

"HealthFind 2002"

*Sponsored by the Office of Rural Community Affairs,
Texas State Office of Rural Health*

Location: Hyatt Regency Hotel, Town Lake, Austin, TX
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P.O. Box 12877, Austin, TX 78711-2877
512-936-6701 or 877-839-2744
FAX 512-479-8898
E-mail: rwright@crhi.state.tx.us
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OCTOBER 7 – 11

"107th Annual Convention and Scientific Seminar"

Sponsored by the American Osteopathic Association

Location: Las Vegas Convention Center, Las Vegas, NV
Contact: Ann Wittner, AOA
800-621-1773, ext. 8256; or 312-202-8014

Note: Advance registration will begin in late summer, 2002.

CME CORRESPONDENCE COURSE

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- ✓ If possible, assign insurance follow-up staff members to particular payers, so they become familiar with those plans.
- ✓ Don't automatically refile claims that are denied or delayed. Follow up with a phone call first.
- ✓ Prioritize follow-up efforts. The goal is to bring revenue into the practice, so first work the high-dollar claims and those that can be dispatched with ease.
- ✓ Implement a process for tracking and monitoring claims.
- ✓ Remember, staff errors can serve as a training opportunity. By identifying problem areas in staff performance, you can alter procedures and establish guidelines for better operations.

TOMA PHYSICIAN SERVICES can help you streamline your insurance filing and follow-up procedures as well as other aspects of your practice operations that affect your bottom line. Contact a TOMA consultant today at 800-523-8776 or physician.services@texmed.org or go to <www.consulting.texmed.org>.

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We Are What We Eat

So, what are we eating?

Actual Consumption vs. Perception of Food Group Servings

The USDA Center for Nutrition Policy and Promotion compared the average number of servings people estimate usually consuming on an average day from the five major food groups, with the average number of servings estimated from records of what they eat over a 14-day period. Also compared were the usual and actual consumption with serving recommendations from the USDA Food Guide Pyramid.



Findings

Grains - All gender/age groups perceived they consumed fewer grain servings (2.5 to 3.2) daily than what they actually ate (4.1 to 6.2). Although the actual consumption was higher than what they believed, it was still below the Pyramid recommendations.

Fruits - On average, each group perceived it consumed more fruit servings daily than what was actually the case. Adults consume less fruit servings than they think and much less than is recommended.

Vegetables - Adult females perceived they consumed more vegetable servings per day than they actually consumed: 2.5 to 2.6 (perceived) versus 1.7 to 2.2 (actual). On the other hand, adult males believed they consumed slightly less than they consumed: 2.2 to 2.5 (perceived) versus 2.3 to 2.7 (actual). Both groups' daily vegetable consumption was below the recommendation.

Dairy Products - All groups perceived their milk servings to be more than what was consumed, on average, 2.1 to 3.2 servings. However, their food diaries indicate they consumed 1 to 1.6 servings. For most groups, what they actually consumed was about half the amount that they thought.

Meat (red meat, poultry, fish, dry beans, eggs and nuts) - All groups perceived their servings to be more than what was actually consumed. They perceived their servings to be 2.7 to 3.7 servings, but their food diaries indicated 1.6 to 2.5 servings. Meat consumption per day was below Pyramid recommendations.

Other Foods (fats, oils and sweets) - Each group perceived its average serving to be less than what was actually consumed: 1.6 to 2.2 (perceived) versus 3.0 to 4.5 (actual). The Food Guide Pyramid does not specify the number or size of servings of this group, but does recommend that they be consumed sparingly. Therefore, it appears that people are not consuming these foods sparingly.

Conclusion

People's perceptions of consumption are different from the reality, based on food diaries. Adults underestimated consumption of grains, fats, oils and sweets. They overestimated consumption of fruit, milk products, and meat, poultry, fish, dry beans, eggs and nuts. The only exception was for vegetables served by males.

(Excerpted from "Consumption of Food Group Servings: People's Perceptions vs. Reality," Nutrition Insights 20. Center for Nutrition Policy and Promotion, <www.usda.gov/cnpp>)

How Does Physical Activity Impact Adult Health?

Seven in 10 Adults Are Not Regularly Active

According to a new HHS report issued April 7, seven in 10 American adults are not regularly active during their leisure time – including four in 10 who are not active at all. The report, "Leisure-Time Physical Activity Among Adults: United States, 1997-98," also found:

- ✗ Lack of physical activity contributes to an estimated 300,000 preventable deaths annually in the U.S., from diseases such as heart disease and diabetes.
- ✗ Nearly 62 percent of adults engaged in at least some kind of physical activity in their leisure time, but only three out of 10 adults were physically active on a regular basis. Regular physical activity was defined as "light-moderate exercise at least five times per week for a minimum of 30 minutes each time and/or vigorous physical activity at least three times a week for a minimum of 20 minutes each time."
- ✗ Men were more likely than women to engage in at least some leisure-time physical activity, and young adults were more likely to be physically active than older adults. Seven out of 10 adults aged 18-24 engaged in at least some physical activity in their leisure time, almost twice the percentage of adults 75 years and older.

Other factors associated with whether people were physically active are:

Education – Nearly eight out of 10 adults with graduate level degrees engaged in at least some form of leisure-time physical activity, twice as many as those with less than a high school diploma.

Income – Adults with incomes at least four times the poverty level were twice as likely to engage in regular leisure-time physical activity than adults with incomes below the poverty level.

Marital Status – Married men and women were more likely than men and women in any other marital status group to engage in at least some leisure-time physical activity, though never-married adults were more likely than married adults to engage in "strengthening activities" such as weight-lifting or calisthenics. Widowed adults were less likely to engage in regular leisure-time physical activity than married adults.



Geography – Two-thirds of adults living in the Western part of the U.S. engage in at least some leisure-time physical activity, compared to 56 percent of adults living in the South. Adults who live in the suburbs are more likely to be physically active than adults in urban or rural areas.

("HHS Report Shows 7 in 10 Adults are not Active Regularly." HHS News release. 4-7-02)

Regular Physical Activity Does Make a Difference

- ✓ Reduces the risk of dying prematurely.
- ✓ Reduces the risk of dying prematurely from heart disease.
- ✓ Reduces the risk of developing diabetes.
- ✓ Reduces the risk of developing high blood pressure.
- ✓ Helps reduce blood pressure in people who already have high blood pressure.
- ✓ Reduces the risk of developing colon cancer.
- ✓ Reduces feelings of depression and anxiety.
- ✓ Helps control weight.
- ✓ Helps build and maintain healthy bones, muscles and joints.
- ✓ Helps older adults become stronger and better able to move about without falling.
- ✓ Promotes psychological well-being.

("The Link Between Physical Activity and Morbidity and Mortality," National Center for Chronic Disease Prevention and Health Promotion, <www.cdc.gov/hccdphp>)



Exercise and the "Common Cold of Mental Illness"

by S/D Adair de Berry-Carlisle, K. L. Rainville, D.O., and Charles Mathis, M.D.

According to the Centers for Disease Control and Prevention (CDC), millions of people are currently suffering from depression. The disease prevalence has been likened to the "common cold of mental health." In the opinion of the CDC, the current impact of depression on the medical world is significant in that "depression by itself has a greater worldwide disease burden than ischemic heart disease, cerebrovascular disease and tuberculosis with a prevalence ranging from 5-25%."¹ It is the purpose of this article to review the relationship between exercise and depression.

In recent years, scientists have produced an overwhelming amount of data declaring the benefits of exercise on an individual's health and physical well being. Despite this evidence, the number of physically active Americans constitutes a staggeringly low percentage. According to recent national studies, "60% of adults were physically inactive or irregularly inactive during leisure-time, and the Third National Health and Nutrition Examination Survey (NHANES III) found that 22% of Americans engaged in no leisure-time physical activity at all."² The studies of benefits gained from exercise were generally focused on the cardiovascular and respiratory components to overall physical fitness.³ It has now been brought to the attention of the medical profession that exercise has an antidepressant effect and can help protect against the harmful effects of stress.⁴ According to the Surgeon General's latest report on physical activity and health, regular exercise (at least three times a week) has been shown to reduce depression and anxiety and improve mood. Even in the face of such compelling information, there is still a resistance of the American public to incorporate exercise into their daily routine.⁵

Peter Salmon of the University of Liverpool states that "published attempts to explain reluctance to exercise continue to emphasize psychological deficits in the individual such as defi-

cient self-motivation or self-efficacy."⁷ He goes on to say that "exercise that is more intense than participants' habitual level is less likely to improve mood and, indeed, is liable to worsen it."⁸ It is important that any exercise regimen instituted for the benefit of an individual be tailored specifically to meet that individual's needs. This must also pertain to the type and intensity of exercise chosen. This fact is pertinent to this discussion in that it has been noted that most depressed patients have a low fitness level and tend to lead sedentary lifestyles.⁶

There are many studies on the physical impact that depression has on the body, but there are very few that actually address the effect that exercise has on the depressed patient. A brief synopsis of the more salient articles will be presented here to illustrate the differing opinions of the various authors based on their and other colleagues' studies.

Exercise, as defined by Webster's New Collegiate Dictionary is "bodily exertion for the sake of developing and maintaining physical fitness." This review, however, confines the definition of exercise to leisure-time or recreational activity that would not be a component of domestic or occupational tasks. The most prevalent exercise methods and materials observed in these studies utilize treadmills or stationary bicycles. This facilitates the gathering of data and the recording of the actual measurements while allowing the training sessions to be conducted in a manner that maintains the continuity of the exercise criteria.⁶ Depressive phenomena used in these studies were consistent with DSM-IV 11 criteria.

In exercise studies reviewed by Tim Meyer and Andreas Brooks, subjects were classified as "clinically depressed," "non-clinically depressed" or a combination of the two categories. These studies concluded that exercise improves mood in

"...there is evidence to suggest that both moderate and vigorous exercise can reduce symptoms of depression."

both clinically and non-clinically depressed patients regardless of their initial level of fitness. Contraindications for participation in these exercise studies focused on cardiovascular illness or infectious disease. In order to accurately assess fitness gains at the end of the trials it was important to measure pre and post fitness levels.⁶

Scott Paluska and Thomas Schwenk reviewed studies using both clinically and non-clinically depressed patients. Their review determined that both groups of study subjects showed improvement in mood, but the "clinically depressed patients" showed greater improvement than the "non-clinically depressed" subjects. They concluded that, "clinically and/or medically treated patients demonstrated the greatest decreases in depressive symptoms with exercise." They went on to say, "exercise intensity and duration are important factors when using exercise therapeutically."⁷

Paluska and Schwenk addressed the issue of compliance with an exercise regimen by depressed patients and suggested a moderately intense program limited to 30-minute sessions. They further explained that both aerobic and nonaerobic physical activity are beneficial in treating mild to moderate depressive symptoms. They noted that individuals diagnosed with severe clinical depression may "manifest the greatest improvement in mood following physical exercise."⁷

Participants in the studies varied in age ranging from adolescents to elderly subjects. Paluska and Schwenk noted that "while major depression affects only 1-2% of adults over 65 years old, depressive symptoms that are below the threshold of DSM-IV criteria have been noted in 10% of older adults and appear closely related to poor functioning."⁷

Several physiological and psychological hypotheses provide possible explanations for improved mood with exercise. The distraction hypothesis states that "the time away from the vicissitudes of daily life offered by physical activity accounts for some of the benefits derived from exercise as well as other therapeutic modalities." The self-efficacy theory proposes that "confidence in one's ability to exercise is strongly related to one's actual ability to perform the behavior." This theory relates to the depressed patient in that increased self-confidence enhances the ability to manage events that challenge one's mental health. The amine hypothesis describes the physiological effect that exercise has on certain neurotransmitters. Serotonin and norepinephrine are monoamine neurotransmitters in the brain that affect arousal and attention. Their deficit has been implicated in depressive and sleep disorders.⁷

Meyer and Brooks discussed the types of exercise used in various studies and its impact on clinically depressed patients. Their article compared types of exercise such as endurance training with strength training. They observed that "psychiatric patients do tend to have a low fitness level which would influence the choice of exercise testing and training methods." They

concluded that "a moderate antidepressive effect exists for regular endurance training" and in accord with Paluska and Schwenk, noted that the most seriously depressed patients may experience the greatest benefits. Additionally, they concluded that duration and intensity are important factors in home-based training for the depressed patient, a four week training period is the minimum time limit for the patient to adopt physical activity into their routine, and training sessions of 30 minutes are regarded as adequate.⁶

Peter Salmon of the University of Liverpool has observed a social component of exercise. He has argued that the very participation in exercise activities may be the measure of success as opposed to the therapeutic factor. "The institution of exercise habits could be the evidence rather than the basis of successful treatment considering that the opportunity for controlled trials of exercise training in people who are clinically depressed is limited because it is implausible that such patients can readily be motivated to exercise." He states that there are "hedonic properties of exercise. The clearest evidence that exercise is enjoyable has emerged when mood has been measured immediately before and after regular exercisers undertake strenuous exercise at a level with which they are familiar."⁸

In contrast to the use of DSM IV criteria for the determination of depression, Dr. Salmon considers demotivation and seeking help as adequate to meet the diagnosis of depression. He concludes that "increased social activity is likely to have been a critical feature of exercise in many early studies and that solitary exercise did not improve depression."⁸ While his opinions differ from those of his colleagues, Dr. Salmon does state the need for further research comparing exercise and pharmacological and psychological treatment modalities.

Dose-response effects of exercise on depressed patients, the effects of long-term strenuous exercise on the elderly, and pre-college and college year exercise patterns have all been studied as predictors of future depression. A number of studies have produced varying degrees of relief of depressive symptoms with exercise. However, some of these studies were confounded by small study size and inconsistent criteria used to assess the subjects.¹

According to Dunn, Trivedi and O'Neal,¹ "it is highly likely that depression, like high blood pressure, has multiple etiologies, and that exercise, acting on multiple biological and psychological systems, could lead to synergistic adaptations that effectively reduce symptoms of these disorders." And, "there is evidence to suggest that both moderate and vigorous exercise can reduce symptoms of depression."¹

Conclusion

There is limited information available that adequately addresses the relationship between exercise and depression. Only the most comprehensive and scientifically based reviews are

mentioned here. Studies suggest a beneficial effect of exercise on depression. This measurable improvement in mood suggests that exercise can decrease depressive symptoms in the majority of clinically and non-clinically depressed patients. Some of these studies have produced ambiguous results, which may be the result of small study size and inconsistent criteria.

A consistent finding among the papers reviewed was the call for additional research into the subject. Areas of interest could possibly address age, gender, and pharmacological therapy as they pertain to exercise and depression. A need exists to establish consistent criteria used to evaluate study data that would produce homogenous, reproducible results. Uniform methods and analyses may also serve to avoid confusion of interpreted data as it pertains to health risks such as decreased heart rate and blood pressure (secondary to increased exercise) that may otherwise obfuscate stress responses. A standardized format of measuring results would avoid misinterpretations of stress responses.

The impact of depression on the future of medicine is significant. Depression is an illness that affects 5-25% of the world's population. Millions of people are burdened with depression, many of which seek professional help. An increase in the demand for the treatment of depression with a population becoming increasingly sedentary and with an increase in older individuals is anticipated. A prescribed exercise regimen to treat this population of patients may have beneficial effects on the quality of their lives. Exercise may be a primary intervention and an inexpensive solution to costly and time-consuming treatments.

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 11. Diagnostic and Statistical Manual of Mental Disorders, 4th Edition. American Psychiatric Association. Washington, D.C. 2000. p.369-376.
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- Charles Mathis, M.D., is Division Medical Director of Admissions at Terrell State Hospital. He did his psychiatry residency, as well as a fellowship in geriatric psychiatry, at UT Southwestern.**

Hippocratic medicine's emphasis is that medical art is subordinate to nature. Hippocrates places the control of patient regime, especially diet, exercise and the general circumstances of life to be the keystone of life.

Vitamins are called vitamins because they are vital. Essential fatty acids are called essential fatty acids because they are essential. Our bodies do not make them and we cannot maintain health, much less fight illness, without them. The concept that supplementation only makes expensive urine is the same mentality that would dictate keeping the oil level in your car on the very bottom of the dipstick because you really don't need more. Detroit can make thousands of cars in a day, but if you are missing one essential part such as spark plugs, then all you have are some very large anchors. Our bodies are no different in that one missing essential nutrient will cause loss of function or inadequate function. In today's world, to not supplement is like intentionally driving your car without all of the spark plugs. Maybe our pharmacology and technology has superseded our common sense in maintaining health and suppressing disease.

We spend 1.3 trillion dollars in the U.S. annually for health care but rank 37th in the world in achieving health care goals, according to the WHO, World Health Report. We have 120 million people with chronic disease, with earlier onset every year. Six out of ten deaths are diet related. Fifty percent of the U.S. population sees alternative practitioners every year, spending 20 billion dollars.

According to the U.S Department of Agriculture, Agriculture Research Service,¹ "Scientific research has demonstrated that what and how much we eat profoundly affects growth, development, and aging, and the ability to enjoy life to the fullest. Dietary intake is linked to risks for development of a variety of common, chronic diseases. Among those diseases linked strongly to diet, the medical costs for medical treatment exceed \$200 billion per year. The economic impact of cardiovascular disease in the U.S. exceeds \$80 billion; that of obesity, \$86 billion; osteoporosis, \$10 billion for care alone; cancer, \$104 billion; and cataract surgery, \$4 billion. The American Cancer Society estimated in 1996 that one-third of the 500,000 cancer deaths annually in the U.S. are due to a variety of dietary factors.

"The staggering cost of nutrition-related disease clearly points out the need to develop effective strategies, based on results of sound human nutrition research, to lower the cost of health care by prevention of disease. The success of nutrition research in the last 30 years to reduce the incidence and severity of cardiovascular and digestive disease, and some forms of cancer is a clear indication that alterations in diet and lifestyle have beneficial effects, both through reduced morbidity and mortality and a concomitant reduction in health care cost. Unlike the Department of Health and Human Services and in particular, the National Institutes of Health, whose research is oriented toward causes and treatment of disease, the ARS human research is targeted towards health, quality of life, prevention of chronic disease and promotion of a nutritious supply of food."¹

As early as 1988, the Surgeon General's report on nutrition stated that nutrition can play a role in the prevention of such diseases as coronary heart disease, stroke, cancer and diabetes.² Studies have also shown that low levels of minerals correlate with many health conditions that are benefited by supplementation. Conditions such as alcoholism, allergy, cancer, candidiasis, cardiomyopathy, chronic fatigue syndrome, diabetes mellitus, fatigue, headache, hypertension, obesity, premenstrual syndrome, and rheumatoid arthritis can be related to dietary deficiencies.³

There is not a lack of information about how large the impact of healthy life style, proper nutrition, exercise and stress management are in producing healthy longevity, but there is a lack of emphasis and dissemination of that information. There are no financial incentives for physicians to spend time in this area. We are not properly reimbursed by insurance carriers for our time, there are no benefits for the pharmaceutical companies, in fact a detriment, and therefore no speakers at seminars and no support for our organizations from this arena of medical care. Conventional medical training tells us that eating three "square" meals a day is all that we need. Valid research tells us that this is not enough. Due to the lack of training and emphasis in medical school, we must teach ourselves and push to change medical training to include the basic facts of life about health, and push for reimbursement that will allow us to live up to the meaning of the term physician, which translated means *teacher*.

continued on next page



NUTRITION

Who Needs It. How to Get It.

by Gerald D. Wootan, D.O., M.Ed.

*The man, not the
disease, is to be treated,
and to treat him well
the physician must
examine the man as a
whole, not merely the
organ or body part
in which the disorder
seems to be located.*

*With regard to disease
the physician must
have two special
objects in view...*

*to do good
and to do no harm.*

—Hippocrates

"Even the 'organic' foods' claiming to be chemical free have been deceiving, since they...contain copper salts, sulphur, insecticides such as dermis dust, pyrethroid insecticides, paraffin, and potassium permanganate."

Philosophically there should be no question as to the importance of nutrition in maintaining health, preventing disease, treating disease, and slowing the aging process, but in every day practice are we truly providing the best information to our patients to maximize their potential for healthy longevity?

If we accept the fact that nutrition is essential, then how do we assure that we are getting what we think we are getting, both from food and supplementation? The quality of food is determined by soil factors such as nutrients, texture, organic matter, as well as other factors of temperature, light, seed type, genetic engineering, planting and harvest dates, post harvest handling and processing.⁴ There are so many variables that consistent quality in foods is impossible to ascertain.⁵ Food composition tables are too unreliable to be used to make health related decisions.⁶ Research by Doctors Data Inc. Lab show that truly organically grown food has 250% more nutrient value than food purchased in a grocery store.⁷ The problem is how to identify good foods. Patients are confused by misleading or meaningless food labels.⁸

The Center for Science in the Public Interest has asked the U.S. Food and Drug Administration to take enforcement action against seven food manufacturers whose product labels deceive consumers with false or misleading claims about the absence of genetically engineered ingredients.⁹ Even the "organic" foods' claim to be chemical free have been deceiving, since they have actually been shown to contain copper salts, sulphur, insecticides such as dermis dust, pyrethroid insecticides, paraffin, and potassium permanganate.¹⁰

If we cannot rely on commercially available foods to adequately provide nutrition, what are we to do? The obvious is to improve the quality of foods, but this is a long and complicated process and will not give us nutrition now. The next obvious step is to supplement. A complete review of studies that substantiate the use of vitamins, minerals and essential fatty acids for health and disease prevention is beyond the scope of this article, but a few examples should justify the need for an additional look at the research.

Research has verified that magnesium deficiency has the potential to contribute to the pathogenesis of coronary atherosclerosis and acute thrombosis.¹¹ Magnesium-treated patients have a significantly decreased frequency of ventricular dysrhythmias compared to placebo-treated patients ($p < 0.04$) and higher postoperative cardiac indices ($p < 0.02$).¹² Patients treated with magnesium show significant blood pressure reduction in patients treated and untreated for hypertension.¹³ Chronic fatigue has been related to hypomagnesemia with improvement after magnesium supplementation.¹⁴ Magnesium levels affect serotonin receptors, nitric oxide synthesis and release, N-methyl-D-aspartate receptors, and other migraine-related receptors and neurotransmitters. Fifty percent of migraine patients have lowered magnesium levels at the time of

the migraine and receive sustained relief when supplemented with magnesium.¹⁵ Daily supplementation of oral magnesium plays a pivotal role in mineral homeostasis in insulin dependent diabetes mellitus.¹⁶ Healthy people absorb only 30% to 40% of ingested magnesium, with the majority being intracellular.¹⁷ The kidneys are very proficient at removing excess magnesium and caution need only be used in patients with renal insufficiency.^{17,18} The elderly are vulnerable to hypomagnesemia-induced malabsorption syndromes and nephrolithiasis.^{18,20} Magnesium deficiency is related to a growing number of disease states and is known to be an essential mineral.¹⁹ It is incumbent that we stress the importance of magnesium in the diet and probably more important, supplementation. This limited view of magnesium emphasizes its importance in health and disease, but it is no more important than any of the essential minerals such as calcium, iodine, zinc, selenium, copper, manganese, chromium, molybdenum or potassium.

Multiple reports suggest that vitamins A, C, E, and beta-carotene reduce the incidence of heart disease and cancer, and even blunt aging-associated damage like cataract formation and arthritis.²¹ Gladys Block, Ph.D., professor of epidemiology and public health nutrition at the University of California, Berkeley, states that "the evidence is good that vitamins C, E, and beta-carotene play important roles in diseases like cancer and heart disease." Dr. Meir Stampfer, associate professor of epidemiology at the Harvard School of Public Health, announced to the American Heart Association at their annual meeting that taking vitamin E supplements of 100 IU or more per day cut the risk of heart disease in a group of 86,000 nurses by 46%. There is enough data available to suggest to patients that they take vitamins, or at least not discourage them from doing so.²¹

A meta-analysis of studies looking at the relationship between fruit and vegetable consumption and cancer revealed that in 128 of 156 studies, there was an inverse relationship between fruit and vegetable consumption and risk of cancer.²² This relationship was not just gastrointestinal cancer but also lung, pancreatic, cervical and breast cancer. Recommended Daily Allowance of all vitamins plus extra vitamin E and beta-carotene improves immune function to the point that there was a reduction of infection related illness of 50% in a study of 96 healthy individuals at the Memorial University of Newfoundland. Thirty milligrams of beta-carotene induced a remission rate of 70% in 25 patients with oral leukoplakia. The *New England Journal of Medicine* has hopefully changed the way we all look at folic acid supplementation and pregnancy.

Omega 6 and omega 3 fatty acids, especially eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), are the essential fatty acids that create a condition of health, and deficiency produces lack of health. The human sources of these essential fatty acids are primarily cold-water, plankton eating fish and some nuts.

EPA and DHA, when supplied in appropriate amounts, alter the lipid composition of the cell walls of most cells in the body and are more favorable for growth, development and restoration of cells at any age.²³ EPA and DHA have been shown to function like hormones in that they affect gene expression.²⁴ When EPA-DHA replace saturated fatty acids in human diets they reduce serum cholesterol and triglycerides.²⁵ This is exemplified by the reduced rate of coronary artery disease in fish-eating populations. Human studies have shown that fish oils decrease the rate of VLDL triglycerides secretion from the liver.²⁶⁻²⁹ EPA, at 4 grams per day, increases bleeding time and decreases platelet count without adverse effects even during and after angioplasty.³⁰ After a primary myocardial infarction, 3 grams of fish oil per day reduce all-cause mortality by 29% over a two-year period, probably due to decreased arrhythmias.³¹ Essential fatty acids may be able to prevent the increase in cellular components generated by monocytes, macrophage, foam cells and platelet aggregation that lead to arteriosclerosis and thrombus formation.^{32,33} Fish oil has been shown to reduce blood pressure in men with essential hypertension.³⁴ Numerous studies have shown that EPH-DHA supplementation can modify inflammatory and immune reactions.^{35,36} A double-blind, cross-over study by Stetson et al³⁷ showed a statistically significant improvement in sigmoidoscopy score and global clinical assessment in patients with ulcerative colitis. Human milk contains EPA-DHA, however, there is none contained in American-made formulas.³⁸ We are just beginning to identify the multiple areas of physiology that are impacted in monumental ways by essential fatty acids.

If we accept the fact that vitamins are vital and essential fatty acids are essential and that today's food lack sufficient quantities to maintain optimal health—then how do we stay healthy?

In America today we must supplement our diet with vitamins, minerals and essential fatty acids if we want to have healthy longevity. The problem is that there is no regulation of the vitamin industry. Good-ol-boys have figured this out and we now have almost as many vitamin companies as we have lawyers, and the similarities may not stop with numbers.

According to a consumerlab.com report of the twenty top-selling dietary supplement types including 500 products, 15% of vitamins and minerals and 40% of herbs failed to pass basic testing. Most failed because they did not meet the amounts of product that were claimed on the package, but some failed because they had excessive amounts of some products and some for containing pesticides and toxic metals. United States Pharmacopoeia (USP) is now offering certification for a fee. Many companies tout their products because they have the stamp of the USP. This stamp is based on Self-Certification. There is no testing required to assure compliance with any guidelines.

Consumerlab.com tested SAME and found that 6 of thirteen products tested had less than one-half the product listed on the label and one product had almost none at all. Gingseng tests showed that 5 of 21 products had less than label claim but 8 of the 21 had a toxic pesticide quinoxaline that they had failed to put on the label. That is 62% that were either poisoned or didn't meet label claim.

In my estimation there is only one way to safely recommend or to safely use a supplement product—that is to use and recommend only products that are not analyzed by a third party. This means that

every portion of every batch of every product is sent to a third party lab for analysis and you have access to the results. This analysis must include dissolvability, absence of bacteria, fungus, pesticides toxins, and assurance that the contents meet label claims. In five years of researching supplement companies, I have found only one company that voluntarily meets these challenges.

Vitamins, minerals and essential fatty acids are the most basic elements for good health and the prevention of disease. We are obligated to assure that our patients are educated about the importance of diet and supplementation. If we don't feel comfortable with our knowledge or comfortable talking about supplements, then we should do as we would do in any other situation - study or refer. This will help us reach the goal of doing good and doing no harm.

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Scurvy Forgotten But Not Gone

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Scurvy, a disease usually associated with ancient British seamen, receives scant attention in current American medicine. Although primary caregivers will admit to having studied scurvy, most would probably say that they have never seen a case or even considered scurvy in their differential diagnosis. Nonetheless, adults whose diets rely on poorly nutritious fast foods are putting themselves at increased risk of this often-forgotten disease.

Scurvy and Vitamin C

Scurvy is a severe deficiency of vitamin C, or ascorbic acid. Its exact incidence is unknown—scurvy is not a reportable disease, nor is it tracked by the Centers for Disease Control. Nonetheless, the incidence is likely to be higher than many physicians suspect.

Vitamin C is associated with formation of collagen, which is important in supporting body structures in skin, bones and tendons. Vitamin C promotes the body's immune functions and is necessary for wound repair as well as healthy teeth and gums.¹ Foods rich in vitamin C include citrus fruits such as oranges, grapefruits, lemons and the limes that prompted the term "limey" to describe British seamen. Other food sources are red or green bell peppers, broccoli, brussels sprouts, cabbage, kiwi fruit and strawberries.²

One cause of vitamin C depletion is smoking, due primarily to the toxicity of the smoke. In addition, smokers eat fewer fruits and vegetables than do non-smokers, thus exacerbating the already deleterious effects of smoking on the body's stores of vitamin C.³

In 2000, the Institute of Medicine published new Dietary Reference Intake (DRIs) values and Tolerable Upper Intake Levels (ULs) for vitamin C and other dietary antioxidants. The DRIs include the Recommended Dietary Allowance (RDA), or the intake that meets the nutrient needs of 97-98% of individuals in a group, as well as other intake measures. Conversely, the UL is the highest level of daily nutrient intake that is likely to pose no risk of adverse health effects to almost all individuals in the general population. In the case of vitamin C, the UL is based on intake from diet as well as supplements. As Table 1 shows, the RDA for vitamin C in adults is 60 for women and 75 for men, and the UL is 2,000 for both genders.

Diagnosing Scurvy

Manifestations of scurvy vary from individual to individual, but are generally evidenced by petechial hemorrhages. These hemorrhages are usually perifollicular and predominate in the hyperkeratotic area such as posterior thighs, anterior forearm and abdomen.⁵ Gingivitis also often occurs. Table 2, on page 16, lists the physical symptoms and signs of scurvy.

The diagnosis of this systemic disease should be suspected when physical symptoms and signs of scurvy are present. History of a prolonged diet poor in intake of vitamin C and without vitamin supplementation—particularly among smokers—should also prompt suspicion of scurvy. A diagnosis of scurvy can be confirmed with a plasma ascorbic acid level of 0.3 mg/dl or less,⁶ although it is important to remember that a single dose of vitamin C can temporarily raise ascorbic acid levels into the normal range despite a depleted body pool and frank scurvy.⁷

Table 3, on page 16, lists major and minor criteria to consider in an initial screening for scurvy. Most scorbutic patients meet at least two major criteria and at least two minor criteria. Many of these patients describe themselves as "meat and potato" folks who

Table 1. Dietary Reference Intakes for Vitamin C

Life Stage Group	EAR (mg/d) ¹		RDA (mg/d) ²		AI (mg/d) ³		UL (mg/d) ⁴
	Male	Female	Male	Female	Male	Female	
0 – 6 months					40	40	ND ⁵
7 – 12 months					50	50	ND
1 – 3 years	13	13	15	15			400
4 – 8 years	22	22	25	25			650
9 – 13 years	39	39	45	45			1,200
14 – 18 years	63	56	75	65			1,800
19 – 70 years	75	60	90	75			2,000
>70 years	75	60	90	75			2,000
Pregnancy							
<18 years		66		80			1,800
19 – 50 years		70		85			2,000
Lactation							
<18 years		96		115			1,800
19 – 50 years		100		120			2,000

¹ Estimated Average Requirement (EAR) is the intake that meets the estimated nutrient needs of half of the individuals in a group

² Recommended Dietary Allowance (RDA) is the intake that meets the nutrient needs of 97-98% of individuals in a group

³ Adequate Intake (AI) is an experimentally-set intake that is used if sufficient evidence is not available to derive an EAR, as is the case with healthy human milk-fed infants (the AI is not equivalent to an RDA)

⁴ Upper Tolerable Limit (UL) is the highest level of daily nutrient intake that is likely to pose no risk of adverse health effects to almost all individuals in the general population

⁵ Not determinable due to lack of data for this age group

consume a diet almost devoid of fresh fruits and vegetables. They also rarely take vitamin supplements.

A Typical Presentation

A 38-year-old white female hospital employee, Mrs. Sanders was a non-alcoholic smoker who had been seen numerous times at the clinic for severe menstrual cramps and joints that swell easily, despite little trauma. She had a negative work-up for arthritis. Her CBC, electrolytes, ANA, RA thyroid function test and sed rate were normal. Scurvy was suspected when she presented with a rash on her right leg as well as pain and swelling in her right knee without trauma. A PIP joint was also swollen. She complained of bruising "terribly easily" and had a poly-neuropathy of the right foot and left upper extremity. She had a slight right knee crepitus present, and perifollicular hemorrhages on the right leg without edema. The hair on her legs was thin and fine.

Mrs. Sanders' memory was extremely poor. She admitted to a dietary history of one meal a day of meat and potatoes. She confessed that she never ate vegetables and might eat a peach about every six months. Her children often joked about putting her in a nursing home because she couldn't remember past 30 minutes. Physically, she looked about 65. Her teeth and gums were in poor condition with gingivitis. Her vital signs were normal.

Mrs. Sanders' lab data showed an ascorbic acid level of 0.1 mg/dl (Normal 0.6-2.0 mg/dl). Lab values were also normal for B12 (424 pg/ml), VRDL and HIV. Thiamin level was notably low, but in the normal range.

With dietary change and a daily regimen of 500 mg vitamin C and a multivitamin, Mrs. Sanders' arthropathy and rash rapidly resolved. Dry beriberi was strongly suspected as a contributing cause of her polyneuropathy and poor memory.

Treating Scurvy

Replacing the body's stores of ascorbic acid is the treatment of choice for scurvy. Indeed, the body's pool is quickly replenished with vitamin C supplementation, including among smokers.⁵ Repletion has been accomplished with doses as small as 6.5 mg of ascorbic acid daily and recovery rate from scorbutic symptoms proportional to the repletion dose.⁶ Treatment with as little as 300 mg a day will replenish the total body in as few as five days.⁹ Because multiple vitamin and mineral deficiencies are likely to accompany scurvy, the most prudent choice is ongoing multivitamin and mineral supplementation as well as proper dietary changes. The 300-500 mg/d recommended treatment falls well within the UL.⁴

Preventing Scurvy

The U.S. Department of Health and Human Services' Healthy People 2010 initiative lists modest goals for food and nutrient consumption: To increase the proportion of persons who consume at least two daily servings of fruit and at least three daily servings of vegetables.¹⁰ The baseline from which these goals were set is the finding that only 28% of persons over the age of 2 consume at least two daily servings of fruit and only 3%

Table 2. Signs and Symptoms of Scurvy

<ul style="list-style-type: none"> • Hyperkeratosis • Congested follicles • Ecchymosis • Subconjunctival and ocular hemorrhages • Swollen and/or bleeding gums • Arthralgia • Joint effusion 	<ul style="list-style-type: none"> • Coiled brittle hair and/or an excessive loss of hair • Peripheral neuropathy • Poor wound healing • Scurvy syndrome • Slight to marked edema • Acne • Dyspnea • Exertion
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Table 3. Screening Criteria for Scurvy

Major Criteria	Minor Criteria
<ul style="list-style-type: none"> • Looks much older than stated age • Teeth and gums in poor condition • Smoker 	<ul style="list-style-type: none"> • Poor hygiene • Unexplained arthralgias predominantly in weight-bearing joints • Bruising easily • Fatigue • Low socioeconomic status • Poorly educated

consume three daily servings of vegetables. Similarly, the National Center for Chronic Disease Prevention and Health Promotion's Behavioral Risk Factor Surveillance System (BRFSS)¹¹ found in 2000 that, despite our southern latitude and abundant local produce, only 35.4% of Texans eat fruits or vegetables once or twice per day and 5.8% eat none at all. Moreover, Texas BRFSS results show that low levels of fruit and vegetable consumption are associated with Hispanic ethnicity and low levels of education and income. Texas BRFSS results also report that 22% of Texans are smokers, and of those, 20% smoke more than one pack per day.

Thus, even if the Healthy People 2010 goals were met and BRFSS results improved, vitamin C intake would likely remain low and fail to alleviate the severe depletions of the vitamin that lead to scurvy. Particularly for those patients who do not consume foods that deliver the highest levels of vitamin C such as citrus fruits and juices and bell peppers, even daily servings of five fruits and vegetables may fall short of the current RDA's of 90 and 75 for men and women, respectively. Thus, supplementation of vitamin C is the most reliable prevention for scurvy, including doses as high as 500 mg per day.

Beyond the minimal recommendations for vitamin C in scurvy prevention, recent studies have shown some striking benefits with much higher doses—for example, to prevent exercise-induced asthma,¹² to enhance natural killer cell activity and T- and B-cell function,¹³ to reduce the incidence of reflex sympathetic dystrophy after a bone fracture¹⁴ and to lower blood lead levels.¹⁵ Research continues to investigate vitamin C's beneficial effects for colds, cancer, strokes, cataracts and heart disease.

A Final Comment

In just one physician's practice in West Texas, more than 30 patients were diagnosed with scurvy in the span of only a year, and all responded well to increased doses of vitamin C and improved nutrition. Thus, scurvy is likely to persist among adults in the U.S. without improved physician awareness, vigilance,

and action. The easy availability and convenience of high calorie, poorly nutritious foods, coupled with busy, stressful lifestyles and poor food choices will likely contribute to the ongoing problem. As the saying goes, "If we are what we eat, then many Americans are fast, easy and cheap!" Similarly, preventing, diagnosing, and treating scurvy can be fast, easy and cheap as well, so long as health care providers know what to look for and what questions to ask of their patients.

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GOUT



by Harlan O. L. Wright, D.O.

The typical attack of gout usually settles in the base joint of the big toe but it can affect other joints in the body also, although not nearly as frequently.

Gout is a form of arthritis but is quite different than what most people think of as arthritis because it doesn't cause the usual stiffness and discomfort in several joints of the body which seems to get gradually worse over a long period of time. Gout, on the other hand, may hit the joint suddenly and reach its maximum intensity in a day or two and then regress to being free of pain or symptoms in a few days to a few weeks, with treatment or possibly without treatment. Generally, symptoms begin in a single joint with pain of mild intensity to start with, but increasing to a very severe pain in a day or two with redness and swelling of the joint and severe tenderness.

Gout is much more prevalent in men than in women--about ten to one. Also, approximately seventy-five percent of primary gout attacks are in the base joint of the big toe. Some authorities feel that gout is a genetic disease but while it is possible this problem has a genetic tendency, I think it is primarily the result of nutritional deficiencies.

Gout has generally been considered a "rich man's disease" and in bygone days was frequently experienced by Kings and Lords and the hierarchy of the ruling classes. We now feel that the reason the rich were plagued with it more than the common folks was because of the rich foods that they ate. That is probably very true. They ate more of the meats and the rich desserts and drank more alcohol--things that the poor could not afford.

Those things are still causative factors today but now we also have the added detriment of the multiplicity of sugar foods and refined flour foods and soft drinks to add to the cause of the problem.

The actual cause of the pain and intense symptoms of gout is the accumulation of uric acid crystals in the involved joint. If you have ever seen uric acid crystals in the microscope or even seen pictures of them, you would understand the reason for the intense pain they cause. Uric acid crystals are very minute and resemble what you might envision as small, very hard, sharply-cut, fine diamonds. Now you may be able to imagine what pain these sharp edges would cause in a joint!

Since the cause of gout is known to be the accumulation of these uric acid crystals in the joint, it should be quite basic that if we prevent uric acid from forming, we could prevent gout--AND SO WE CAN. Uric acid is formed from the breakdown of tissue. In gout, tissue is broken down faster than the body can properly metabolize it. Some tissue breakdown is a normal part of living and aging and can be handled by the body without difficulty, but when it becomes excessive and there is a deficiency of the necessary nutrients in the body to convert uric acid to its harmless components, urea and ammonia, uric acid crystals form and then the pain starts.

There are two primary drugs that are prescribed to treat this condition once it has occurred. Colchicine is used in increasing doses until the pain is relieved. The problem with this drug is that it has many side effects that can be quite serious, including nausea, vomiting, neuritis, skin problems and several life-threatening problems if used over long periods of

*"If you have
ever experienced
a Gout attack,
you will not
soon forget it."*

time. Zylprim is a drug used after the initial crisis of pain is gone. However, this drug has the possibility of some serious side effects also, including liver damage and gastrointestinal problems.

Since gout cannot only be treated but prevented with nutritional measures which are quite simple and harmless, why not do it the nutritional way? First, stop eating the excessive amounts of meat, sugar foods and alcohol, etc., which have a big part in causing the problem. Then, copious amounts of fresh fruits and vegetables must be eaten to alkalinize the body. Since vitamin E complex helps in preventing the breakdown of the nucleus of the cells, it should be taken in quantities of at least 800 mg. per day. Next, Pantothenic Acid (B5) is very important because it is required to convert the uric acid to its harmless components, urea and ammonia, to be eliminated by the kidney. A deficiency of this vitamin is one of the reasons gout strikes in the first place. Next, B6 is very important in the treatment of this problem; I usually give 100 mg. twice a day. Magnesium is important in the utilization of B6; I give at least 500 mg. a day. I give at least 500 mg. of Potassium in the acute phases of gout. Last, but not least, drink plenty of pure water to get the end products of tissue breakdown out of the body.

I cannot emphasize enough how important the diet is in the treatment and prevention of this problem. No one need have gout if plenty of fresh fruits and vegetables are eaten and if one abstains from the junk food and takes reasonable amounts of the nutrients described in this article.

So, have a good life *without* gout.

Harlan O. L. Wright, D.O., has been in practice in Lubbock for the past 50 years, and is still actively practicing nutritional and manipulative work. He has authored many articles for nutritional magazines over the years. Dr. Wright has a weekly hour radio show called "Letters to My Patients," during which he talks about alternative medical treatments for common problems and answers questions from the radio audience.

TOMA Welcomes New Members

The Board of Trustees of the Texas Osteopathic Medical Association is pleased to introduce the following new members who were formally accepted at the April 19, 2002 Board meeting.

Jorge Alba, D.O.

710 FM 1960 West
Houston, TX 77090

Dr. Alba is a member of District 6. He graduated from the New Jersey School of Osteopathic Medicine in 1985, and is Certified in Pediatrics and Neonatology.

Wayne R. Buchwald, D.O.

5412 Boulder Highway
Las Vegas, NV 89121

Dr. Buchwald is a Non-Resident Associate Member. He graduated from the Philadelphia College of Osteopathic Medicine in 1974, and specializes in Family Practice.

John F. Carlson, D.O.

764 W. Commerce Street
Fairfield, TX 75840

Dr. Carlson is a first year member and a member of District 18. He graduated from the Philadelphia College of Osteopathic Medicine in 1997, and is Certified in Family Practice.

William M. Chambers, Jr., D.O.

401 Stribling
Azle, TX 76020

Dr. Chambers is a member of District 2. He graduated from the Texas College of Osteopathic Medicine in 1988, and is Certified in Family Practice.

Bart W. Crosby, D.O.

3295 S. Cooper Street
Arlington, TX 76015

Dr. Crosby is a first year member and a member of District 15. He graduated from the Texas College of Osteopathic Medicine in 1998, and is Certified in Family Practice.

Susan G.P. Dalton, D.O.

618 Everglade Dr.
Mansfield, TX 76063

Dr. Dalton is a first year member and a member of District 2. She graduated from the Texas College of Osteopathic Medicine in 1987, and specializes in Anesthesiology. Dr. Dalton was referred for membership by A. Duane Selman, D.O.

Donald C. Dunlap, Jr., D.O.

2140 E. Southlake Blvd. #L702
Southlake, TX 76092

Dr. Dunlap is a member of District 5. He graduated from The University of Health Sciences College of Osteopathic Medicine in Kansas City, Missouri, in 1977, and specializes in Family Practice and Pain Management.

Daniel L. Francis, D.O.

Dr. Francis is a first year member and a member of District 10. He graduated from the Philadelphia College of Osteopathic Medicine in 1998, and is Certified in Family Practice.

Kelly D. Grimes, D.O.

1000 Montgomery
Fort Worth, TX 76107

Dr. Grimes is a first year member and a member of District 2. He graduated from The University of Health Sciences College of Osteopathic Medicine in Kansas City, Missouri, in 1998, and is Certified in Family Practice.

Marc B. Hahn, D.O.

3500 Camp Bowie Blvd.
Fort Worth, TX 76107

Dr. Hahn is a member of District 2. He graduated from the University of Osteopathic Medicine and Health Sciences, College of Osteopathic Medicine and Surgery in Des Moines, Iowa, in 1984, and is Certified in Anesthesiology and Pain Management. He is currently Dean of TCOM.

Joel T. Hendryx, D.O.

6040 Surety Dr.
El Paso, TX 79905

Dr. Hendryx is a member of District 11. He graduated from the Texas College of Osteopathic Medicine in 1986, and is Certified in Obstetrics and Gynecology.

Shawn M. Henry, D.O.

3773 Timberglen Rd. #2005
Dallas, TX 75287

Dr. Henry is a first year member and a member of District 5. He graduated from the Ohio University College of Osteopathic Medicine in 1996, and specializes in Orthopedic Spine Surgery.

Gary W. Hillman, D.O.

2689 65th Street
Port Arthur, TX 77640

Dr. Hillman is a first year member and a member of District 12. He graduated from the University of Osteopathic Medicine and Health Sciences/College of Osteopathic Medicine and Surgery in Des Moines, Iowa, in 1998, and specializes in Family Practice.

Terry D. Jones, D.O.

5419 N. Lovington Hwy. #5
Hobbs, NM 88240

Dr. Jones is a Non-Resident Associate Member. He graduated from Oklahoma State University/College of Osteopathic Medicine in 1993, and is Certified in Family Practice.

Roberta M. Kalafut, D.O.

1888 Antilley Rd.
Abilene, TX 79606

Dr. Kalafut is a member of District 4. She graduated from the Ohio University College of Osteopathic Medicine in 1984, and specializes in Physical Medicine and Rehabilitation.

Adam L. Kouyoumjian, D.O.

4031 W. Plano Parkway #100
Plano, TX 75093

Dr. Kouyoumjian is a first year member and a member of District 5. He graduated from

the Chicago College of Osteopathic Medicine of Midwestern University in 1994, and specializes in Orthopedic Surgery.

Mark L. McClanahan, D.O.

706 E. Felt
Brownfield, TX 79316

Dr. McClanahan is a first year member and a member of District 4. He graduated from the Texas College of Osteopathic Medicine in 1987, and is Certified in Family Practice.

Michael K. McFarland, D.O.

7925 S. Hulen St.
Fort Worth, TX 76132

Dr. McFarland is a first year member and a member of District 2. He graduated from the Texas College of Osteopathic Medicine in 1994, and is Certified in Internal Medicine.

Michael J. Methner, D.O.

4201 CR 1022
Cleburne, TX 76031

Dr. Methner is a first year member and a member of District 2. He graduated from The University of Health Sciences College of Osteopathic Medicine in Kansas City, Missouri, in 1998, and specializes in Internal Medicine.

Herbert C. Mueller, M.D.

9991 Marsh Lane
Dallas, TX 75220

Dr. Mueller is an Associate Member. He graduated from the Texas Tech School of Medicine in Lubbock in 1977, and specializes in Internal Medicine.

Hanh Dung T. Nguyen, D.O.

6780 Abrams Rd. #211
Dallas, TX 75231

Dr. Nguyen is a first year member and a member of District 5. She graduated from Nova Southeastern University of Health Sciences-College of Osteopathic Medicine in 1998, and is Certified in Family Practice.

Ronald C. Only, D.O.

502 W. Jasper Road
Killeen, TX 76542

Dr. Only is a first year member and a member of District 7. He graduated from the New Jersey School of Osteopathic Medicine in 1998, and is Certified in Family Practice.

David Ostransky, D.O.

4936 Collinwood Avenue #100
Fort Worth, TX 76107

Dr. Ostransky is a member of District 2. He

graduated from the Kirksville College of Osteopathic Medicine in 1979, and is Certified in Internal and Pulmonary Medicine.

Mindy M. Plotkin, D.O.

2287 Mowry Ave. #C
Fremont, CA 94538

Dr. Plotkin is a Non-Resident Associate Member. She graduated from the Texas College of Osteopathic Medicine in 1997, and specializes in Obstetrics and Gynecology.

Damon A. Schranz, D.O.

UNTHSC Seminary Clinic
1305 E. Seminary Dr.
Fort Worth, TX 76115

Dr. Schranz is a first year member and a member of District 2. He graduated from the Texas College of Osteopathic Medicine in 1998, and is Certified in Family Practice.

Cobra A. Shanley, D.O.

P.O. Box 792
La Grange, TX 78945

Dr. Shanley is a first year member and a member of District 9. She graduated from the Texas College of Osteopathic Medicine in 1998, and is Certified in Family Practice.

Mark W. Sij, D.O.

874 W. Hwy 243 #108
Kaufman, TX 75142

Dr. Sij is a first year member and a member of District 3. He graduated from the Texas College of Osteopathic Medicine in 1998, and specializes in Internal Medicine.

Barry S. Simkin, D.O.

855 Montgomery Street
Fort Worth, TX 76107

Dr. Simkin is a first year member and a member of District 2. He graduated from the University of New England College of Osteopathic Medicine in 1997, and is Certified in Internal Medicine and Geriatrics.

Denise L. Tarver, D.O.

7616 Culebra #130
San Antonio, TX 78251

Dr. Tarver is a member of District 17. She graduated from Michigan State University College of Osteopathic Medicine in 1979, and is Certified in Family Practice.

Jonathan P. Tripp, D.O.

1240 W. Oaklawn #101
Pleasanton, TX 78064

Dr. Tripp is a first year member and a member of District 17. He graduated from

the Kirksville College of Osteopathic Medicine in 1998, and is Certified in Family Practice and Osteopathic Manipulative Medicine.

Da-Thuy T. Van, D.O.

125 Willow Lane
Stephenville, TX 76401
Dr. Van is a first year member and a member of District 2. Dr. Van graduated from Ohio University College of Osteopathic Medicine in 1997, and specializes in Ophthalmology.

Lewis Westerfield, D.O.

713 E. Anderson
Weatherford, TX 76086
Dr. Westerfield is a member of District 2. He graduated from the Texas College of Osteopathic Medicine in 1993, and is Certified in Internal and Emergency Medicine.

Benefit Designers of Texas, Inc.

Mary Starr
14141 Hwy 290 West #500
Austin, TX 78737
Benefit Designers is an Affiliate Member.

New Intern and Resident Members

Erik Austin, D.O. graduated from Western University of Health Sciences in Pomona, California in 2001, and serving an Internship at Henry Ford Health System in Detroit, Michigan.

Roberto Cardarelli, D.O. graduated from the Texas College of Osteopathic Medicine in 2001, and is serving an Internship at Ben Taub General Hospital in Houston.

Rick Jui Han Lin, D.O. graduated from the Texas College of Osteopathic Medicine in 2001, and is serving an Internship at Dallas Southwest Medical Center.

Nancy L. Luongo, D.O. graduated from the Philadelphia College of Osteopathic Medicine in 2000, and is serving a Family Practice Residency at St. Paul University Hospital in Dallas.

George Keith Ragsdale, D.O. graduated from The University of Health Sciences College of Osteopathic Medicine in Kansas City, Missouri, in 2001, and is serving a Residency in Anesthesiology at Scott and White Memorial Hospital in Temple.

Alberto Santos, III, D.O. graduated from the Texas College of Osteopathic Medicine in 2001, and is serving a Family Practice Residency at Bay Area Medical Center in Corpus Christi.

Cary N. Schneider, D.O. graduated from The University of Health Sciences College of Osteopathic Medicine in Kansas City, Missouri, in 1985, and is serving a Family Practice Residency at Dallas Southwest Medical Center.

William F. Simpson, Jr., D.O. graduated from the West Virginia School of Osteopathic Medicine in 1997, and is serving a Residency in General Surgery at the Osteopathic Medical Center of Texas in Fort Worth.

Justin S. Sparkes, D.O. graduated from Nova Southeastern University of Health Sciences-College of Osteopathic Medicine in 2001, and is serving an Internship at Texas Osteopathic Medical Center in Fort Worth.

Ramana G. Surya, D.O. graduated from the Texas College of Osteopathic Medicine in 1998, and is serving a Residency in Psychiatry at Parkland Hospital in Dallas.

TOMA 57th Annual House of Delegates Meeting April 19, 2002 – Round Rock, Texas

Major Actions of the TOMA House of Delegates

MOTION: That life membership in TOMA be approved for Max E. Ayers, D.O., of Athens; Bernard H. Feigelman, D.O., of Richardson; Elmer L. Kelso, D.O., of Cranfills Gap; and Phillip P. Saperstein, D.O. of Fort Worth.

APPROVED

RESOLUTION NO. 1 PERTAINING TO DIETARY SUPPLEMENTS:

The House of Delegates calls upon the AOA to request that the U. S. Congress amend DSHEA (the Dietary Supplement Health and Education Act of 1994) so that dietary supplements will undergo premarket safety and efficacy evaluation by the FDA; and further resolves to forward this resolution to the AOA House of Delegates for its consideration.

APPROVED

RESOLUTION NO. 2 PERTAINING TO DISPARITIES BETWEEN RURAL AND URBAN PRACTICE:

The House of Delegates supports Federal legislation that would establish a minimum geographic cost-of-practice index value for physicians' services of 1.000; and further resolves to forward this resolution to the AOA House of Delegates for its consideration.

APPROVED

RESOLUTION NO. 3 PERTAINING TO D.O. DAY ON THE HILL:

The House of Delegates supports the concept of scheduling future D.O. day on the Hill events to encompass the COSGP and SOMA conferences in order that maximum participation of students leaders, as well as practicing physicians, can be assured; and further resolves to forward this resolution to the AOA House of Delegates for its consideration.

APPROVED

RESOLUTION NO. 4 PERTAINING TO TOMA DISTRICT 7 SERVING AS THE HOST DISTRICT FOR THE 2002 TOMA CONVENTION:

The House of Delegates goes on record expressing sincere appreciation to TOMA District 7 for serving as the host district for the 2002 TOMA annual convention.

APPROVED

RESOLUTION NO. 5 PERTAINING TO PROFESSIONAL LIABILITY INSURANCE:

The House of Delegates calls upon the Texas Legislature to make effective tort reform a high priority in order to lower the high cost and limited availability of professional liability insurance; and further resolves to forward this resolution to the AOA House of Delegates for their consideration in supporting the passage of an effective nationwide federal tort reform law.

APPROVED AS AMENDED

RESOLUTION NO. 6 PERTAINING TO PROMPT PAY LEGISLATION: The House of Delegates urges the Texas Legislature, the Governor of Texas, and the Texas Insurance Commissioner in the strongest possible terms to pass and implement Prompt Pay Legislation in Texas that includes appropriate fines, maximum allowable interest, and penalties for non-compliance by insurers.

APPROVED AS AMENDED

RESOLUTION NO. 7 PERTAINING TO SENIOR PRESCRIPTION DRUG DISCOUNTS: The House of Delegates goes on record in support of pharmaceutical company programs that provide senior citizens with discounts on prescription drugs for a modest co-payment; and further resolves to forward this resolution to the AOA House of Delegates for its consideration.

APPROVED AS AMENDED

RESOLUTION NO. 8 PERTAINING TO TAKE BACK LAWS: The House of Delegates calls upon the Texas Legislature to pass legislation with wording stipulating that the insurance carriers' appeal period that is applicable to the physician, is also applicable to the insurance carrier; and further resolves to forward this resolution to the AOA House of Delegates for its consideration to request federal legislation from the U.S. Congress.

APPROVED AS AMENDED

RESOLUTION NO. 9 PERTAINING TO TERM LIMITS FOR TRUSTEES OF THE TEXAS OSTEOPATHIC MEDICAL ASSOCIATION BOARD:
PULLED BY DISTRICT

RESOLUTION NO. 10 PERTAINING TO THE USE OF LASERS: The House of Delegates supports a policy that the use of a Class IV medical device to alter or change tissue constitutes surgery; and further supports the policy that a physician must be on site in order to delegate a procedure with a Class IV medical device by a non-physician.

APPROVED AS AMENDED

RESOLUTION NO. 11 PERTAINING TO THE CONVERSION FACTOR FOR THE MEDICARE FEE SCHEDULE: The House of Delegates supports federal legislation whereby the SGR system (sustainable growth rate) would be replaced with an annual update based on factors influencing the unit costs of efficiently providing physician services; and further resolves to forward this resolution to the AOA House of Delegates for its consideration.

APPROVED AS AMENDED

RESOLUTION NO. 12 PERTAINING TO THE CODE OF ETHICS OF THE TEXAS OSTEOPATHIC MEDICAL ASSOCIATION AND THE AMERICAN OSTEOPATHIC ASSOCIATION: The TOMA House of Delegates calls upon the AOA House of Delegates to revise Section 11 of its Code of Ethics so that it reads as follows: "In any dispute between or among physicians regarding the diagnosis and treatment of a patient, the attending physician has the responsibility for final decisions consistent with any applicable (osteopathic) hospital rules or regulations."

APPROVED

RESOLUTION NO. 13 PERTAINING TO A "ROLL OF HONOR" FOR TOMA'S HOUSE OF DELEGATES WITH 20 YEARS OR MORE OF SERVICE: The House of Delegates authorizes its Speaker to appoint an Ad Hoc Committee of the House to handle the administrative duties associated with the development and periodic updating of a "Roll of Honor" for osteopathic physicians with 20 or more years of service in the TOMA House of Delegates.

APPROVED AS AMENDED

Other Action Taken by the House

Sunset Review of Resolutions Passed by the 1997 TOMA House of Delegates and Completed Resolutions

NUMBER	TITLE
	DELETE
97-05	"Elbow-to-Elbow" HCFA Rules for Post Doctoral Training Programs
01-24	Host District
01-26	Osteopathic Physicians Who Have Completed Terms on the Texas Medical Foundation's Board of Trustees
	REAFFIRM
97-10	Bundling of OMT into Capitation Fee for Office Visit
97-15	Data Bank
97-16	Drug Industry Gifts
97-19	Hepatitis B Vaccinations for Texas Health Care Workers
97-13	Medicare Resource Based Relative Value Scale for OMT
97-14	OSHA Regulations
97-17	Prescribing Pharmacists

Revised Resolutions

denotes new language

[denotes deleted language]

97-09 DENIAL OR LIMITATION OF HEALTH CARE COVERAGE BASED ON GENETIC INFORMATION

WHEREAS, Texas osteopathic physicians are very concerned with the potential for misuse of genetic research, and WHEREAS, everyone could be found to have pre-existing medical conditions based on genetic information since almost everyone has gene mutations that predispose them to certain illnesses, and

WHEREAS, legislation is needed that would prevent health care insurers from using genetic data in deciding whether to hire or fire someone unless they can prove the information is job related, and

WHEREAS, health insurers and employers should be required to obtain written informed consent for the request, collection, or disclosure of genetic information from an individual and releasing that information to a third party, therefore

BE IT RESOLVED, that the TOMA House of Delegates goes on record supporting legislation to ban genetic discrimination by employers and health care insurers [, and

BE IT FURTHER RESOLVED, that this resolution be forwarded to the AOA House of Delegates for consideration.]

97-18 MEDICAID PATIENTS USAGE OF EMERGENCY ROOMS

WHEREAS, many physicians must provide extensive coverage to local hospital emergency rooms, and

WHEREAS, many Medicaid patients have historically used the hospital emergency room when they could use a doctor's office, [and

WHEREAS, the new Medicaid (TMRM) rate for the emergency room, visit code 99281, is \$22.31, and that fee will be reduced to \$13.39 (60 percent of \$22.31 for non-emergent diagnoses),] therefore

BE IT RESOLVED that the TOMA House of Delegates request TOMA work with the Texas Commission of Health and Human Services to: (1) educate their clients on the appropriate use of emergency rooms; (2) encourage early "lock-in" for those patients identified as over utilizing hospital emergency rooms; and (3) eliminate penalties to the physician for the patients' inappropriate use of emergency rooms, (i.e., do not reduce reimbursement to 60 percent for non-emergent visits).

97-06 REPORTING OF ILLEGAL IMMIGRANTS TO IMMIGRATION AND NATURALIZATION SERVICE

WHEREAS, provisions in two federal laws restrict preventive services and primary care to legal and illegal immigrants and could result in health care providers reporting illegal immigrants to the Immigration and Naturalization Service (INS) for possible deportation, and

WHEREAS, the Welfare Reform Act gives states greater discretion in denying Medicaid coverage to legal and illegal immigrants, and

WHEREAS, contagious diseases do not discriminate between citizens and non-citizens, and

WHEREAS, physicians should be especially vigilant in states with high numbers of immigrants, and

WHEREAS, infectious diseases such as tuberculosis and measles are on the rise among this segment of the population, therefore

BE IT RESOLVED, that the TOMA House of Delegates requests the AOA, through the Council on Federal Health Programs, petition HCFA to review and modify its rules and regulations to insure that physicians are indemnified and therefore not held responsible to identify the legal resident status of any patient, and BE IT FURTHER RESOLVED, that the TOMA House of Delegates requests the AOA, through the Council on Federal Health Programs, petition HCFA to place the interests of U.S. public health as the primary consideration in determining who receives health care services [, and

BE IT FURTHER RESOLVED, that this resolution be forwarded to the AOA House of Delegates for consideration.].

97-07 TOMA RESOLUTION ACTION PLAN

WHEREAS, many Texas osteopathic physicians donate their time to represent the profession at the TOMA House of Delegates, and

WHEREAS, their actions represent the policies of the membership for this organization, therefore

BE IT RESOLVED, that the TOMA House of Delegates directs the TOMA Executive Director, in the annual report to the TOMA House of Delegates, report all actions and on-going activities reflecting the due diligence of the TOMA Board of Trustees in accomplishing the approved resolutions. This report shall include information pertaining to each and all resolutions passed by the TOMA House of Delegates until it reaches final disposition, including actions taken by agencies and/or committees to whom any resolutions may have been referred [, and **BE IT FURTHER RESOLVED**, that the TOMA House of Delegates submit a similar resolution to the AOA House of Delegates for adoption].

The House of Delegates observed a minute of silence for the following members, family and friends who have passed on during the past year: Robert H. Renfro, Jr., D.O.; Grover Stukeby, D.O.; Sherman P. Sparks, D.O.; Alan R. Boyd, D.O.; Willie Mae Bonner Elliot, D.O.; Wyman P. Sandlin, D.O.; Edmund D. Buckalew, D.O.; Mrs. Ted C. (Betty) Alexander, Jr.; Trent A. Kirschstein, D.O.; Hyman Kahn, D.O.; David B. Greene, D.O.; George M. Esselman, D.O.; John Boyd, D.O.; William R. Boone, Sr., D.O.; Thomas Lavaty, D.O.; Marion E. Coy, D.O.; Allen W. Jacobs, D.O., Ph.D.; Keith L. Hull, Sr., D.O.; John C. Phillips, D.O.; Lynn F. Fite, D.O.; Mary Edwina Larmoyeux Luibel; and James H. Kritzer, D.O.

The following physicians were recognized for their service in the TOMA House of Delegates:

- 5 YEARS** Ronald W. Brenz, D.O.; Adam B. Smith, D.O.
- 11 YEARS** Elizabeth A. Palmrozzi, D.O.
- 12 YEARS** George M. Cole, D.O.; Joseph A. Del Principe, D.O.
- 13 YEARS** Daniel W. Saylak, D.O.; George N. Smith, D.O.
- 14 YEARS** Kenyon R. Behrens, D.O.; D. Dean Gafford, D.O.; Carl V. Mitten, D.O.; Paul S. Worrell, D.O.
- 15 YEARS** Al E. Faigin, D.O.; Royce K. Keilers, D.O.; Monte E. Troutman, D.O.
- 16 YEARS** James W. Czewski, D.O.
- 17 YEARS** Kenneth S. Bayles, D.O.; Bill V. Way, D.O.
- 18 YEARS** David M. Beyer, D.O.; James E. Froelich, III, D.O.; R. Greg Maul, D.O.; Randall W. Rodgers, D.O.; Arthur J. Speece, III, D.O.; Rodney M. Wiseman, D.O.
- 19 YEARS** Mark A. Baker, D.O.
- 20 YEARS** Nelda N. Cuniff-Isenberg, D.O.; Jerry E. Smola, D.O.
- 22 YEARS** James G. Matthews, Jr., D.O.; John L. Mohney, D.O.
- 23 YEARS** Joseph Montgomery-Davis, D.O.
- 25 YEARS** Robert G. Maul, D.O.; Robert L. Peters, D.O.; Merlin L. Shriner, D.O.
- 26 YEARS** Donald F. Vedral, D.O.
- 30 YEARS** Bill H. Puryear, D.O.
- 32 YEARS** John J. Cegelski, Jr., D.O.
- 33 YEARS** Donald M. Peterson, D.O.
- 34 YEARS** T. Eugene Zachary, D.O.
- 37 YEARS** David R. Armbruster, D.O.

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Physicians can now train staff to become *x-ray equipment operators* with this convenient educational tool. The OTJ program allows physicians to effectively train individuals to perform routine diagnostic X-Ray procedures in their office. The two-binder program includes a physician's training guide and a student workbook. All tests, answer keys, certificates and forms are included.

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Self's Tips & Tidings



By Don Self

Who Needs It?

If you get in a shipment of rubber gloves, you route that box to the nurses in your practice. You don't hand it to the front office staff to use. Along those lines, when you get this magazine each month, you read this monthly column and then file it away – so you only get 10% to 20% of its value to your practice. Thousands of medical offices pay Don Self & Associates, \$195 a year for a monthly 8-page newsletter subscription, which is different than this 2-page article each month. Wouldn't it be a shame if they didn't read it when they get it, and you get this for free! My advice for you is to hand this to your office manager to copy each month, as he/she will know how to best use this information on your claims, your fees, and your collections.

Docs Can No Longer Survive on Just Office Visits

There was a time when a family physician could hang out a shingle, start seeing patients in their office and make a decent living charging for office visits. Unfortunately, those days are no more, thanks to Medicare reductions, one-sided managed care contracts, Medicaid entitlements and increased expenses involved in running a practice. Today, if you want to survive and make a decent living for your family, you have to do more than examinations and writing prescriptions. Yes, you can make some money doing OMT, but that still will not be enough when you consider the fact that some managed care plans you're enrolled in refuse to pay an office visit when you do an OMT (Why do you sign those kind of contracts anyway?).

So, what do you do? You look for ancillary services. As a reimbursement consultant, I've had to find ancillary diagnostics or therapies that meet 3 requirements for my clients:

1. The service must be medically viable and proven to help patients,
2. The service must be one that will be

- utilized by my particular client, and
3. The service must be at least moderately profitable.

Members of TOMA regularly call, fax or e-mail me asking if this service or that service will be paid for and I look them up. Usually, I don't recommend that a primary care physician spend a lot of money on X-rays and definitely have second thoughts before putting in a CLIA approved lab in your office. I definitely like one electrical stimulation piece of equipment; it pays well and I've been known to recommend it. I like the heel – DEXA machines as they also pay well, when there is medical necessity. Sometimes, I have to tell you to use different codes on this or that than what the equipment salesmen tell you, but I let you know if it's profitable. I have found 2 that we're doing with my osteopathic doctors all over the state, and in other states as well, that are highly profitable and beneficial to most of the patients. If you have patients with migraine headaches or IBS, let me strongly encourage you to call me for information on the LEAP tests. The average payment gives more than \$400 profit to the practice and is helping more than 70% of my clients' patients with certain diagnoses. If you're not doing cardiac event monitors in your practice – call me. The average non-Medicare payment on these exceeds \$400 as well, and you have zero expenses involved. Also, check with us before you spend a lot of money on a lease for any equipment or you take coding advice from any pharmaceutical representatives. You might avoid some costly fines and penalties, as you'll see in this next article. Once again – before you sign on that lease – give us a call at 800-256-7045. You may find out too late that Medicare is dropping payment.

Mini Mental Status Exam – You're Not Doing it

Many physicians and clinics are listening to a pharmaceutical representative when they are given a series of questions to ask the patients. They are being

told to bill for 96115, yet if they do, they are filing a fraudulent claim under the False Claims Act. The MMSE is a test that has to be sent off and graded and sent back to you; you cannot "grade" it yourself. When you have the patient go through those questions, that is just part of your E&M (visit) and cannot be counted separately.

Can I Bill For...?

- A. I had a patient come in with dual personality schizophrenia. Do I charge one office visit or two?
- A. Unless you have a dual personality with two different provider numbers yourself, just bill one office visit – regardless of how many personalities the patient has.
- A. I have Medicare insurance myself. Yesterday, I had to run a stress test and lab work on myself. Am I allowed to bill Medicare for myself?
- A. No. Medicare has a policy whereby they do not pay for a service on a family member that would probably get the service for free, if the patient didn't have Medicare. Seeing that you are your father's son, you are a relative to yourself, so you cannot bill Medicare for the services you provide to yourself. One more thing – if you disagree with your diagnosis – get a second opinion.
- A. Can I charge for drawing the blood, when I bill for the blood test?
- A. Yes, you can and should bill for drawing the blood. What codes you use depends on the type of insurance. If it is Medicare and you used a vial – bill G0001. If it is Medicaid – charge a handling charge (99000). If it is anyone else, bill out 36415.

Photo ID a Must for New Patients

Some people are misunderstanding my recommendation to get a copy of the drivers license of every new patient (or

responsible party) to make sure you're dealing with whom you think you are. While I recommend you do so on every new patient, I also recommend that you make a copy of the Medicaid patient's Medicaid card on every visit – not just the first one. Patients get and lose eligibility from month to month. It is not unheard of for a young patient to show up with a Medicaid card and later find out the person you treated was not the person on the card.

Disclosing Social Security Number

Many people misunderstand the privacy laws concerning the social security number. Patients do not have to present their social security number to you, but then you don't have to accept them as new patients, either. Here is a story from one consultant in Washington, D.C.:

An attorney (new) patient came to the check-in window. He completed the forms, left the SSN blank and gave me his insurance card. When I reviewed the data, I asked him for his SSN and he said "you don't need it, it's not required information."

I asked him if he wanted to pay in full for his visit. He looked at me kind of funny and asked why. I showed him his United Healthcare card, which had only a group number on it, but he had not filled in the SSN and signed the back. I said, "Sir, without it, I can't submit a claim on your behalf. Would you like to use cash, check, MasterCard, or VISA?" He gave me his social security number.

Questions Answered

Yes. Please come see me at my booth at the TOMA and the TxACOPF conventions. However, you are also welcome to e-mail questions to me at donself@donself.com or visit my site at www.donself.com. Make sure you identify that you are a member of TOMA. If there will be a charge for answering the question, you'll be notified before charges are made.

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News

from the University of North Texas Health Science Center at Fort Worth

Blank Named to Board of Public Policy Organization

The Annapolis Center for Science-Based Public Policy has named Ronald R. Blanck, D.O., president of the University of North Texas Health Science Center at Fort Worth, to its board of directors.

Blanck will also serve on The Annapolis Center's Medical Advisory Committee. The committee provides an opportunity for leading experts in the environmental, health, medical and safety fields to exchange opinions and strategies regarding emerging trends.

The Annapolis Center for Science-Based Public Policy is a national, non-profit educational organization that supports and promotes responsible environmental, health and safety decision making through the use of sound science. It was founded by a group of scientists, former policy-makers, and economists committed to ensuring that public policy decisions are based on scientific facts and reasoning.

Blanck joined the UNT Health Science Center in August 2000 after his retirement from the U.S. Army. He began his military career in 1968 as a medical officer and battalion surgeon in Vietnam. He retired 32 years later as the Surgeon General of the U.S. Army and commander of the U.S. Army Medical Command -- with more than 46,000 military personnel and 26,000 civilian employees throughout the world.

Board certified in internal medicine, Blanck is considered an expert on bioterrorism issues. He currently chairs the American Osteopathic Association's Task Force on Bioterrorism and the Texas Medical Association's Task Force on Bioterrorism.

U. S. News & World Report Ranks UNT Health Science Center Among Top Primary Care Medical Schools

The University of North Texas Health Science Center at Fort Worth has been ranked as one of the country's top medical schools in primary care by *U.S. News & World Report*. The magazine published its annual rankings of America's best graduate schools in its April 15 issue.

The Texas College of Osteopathic Medicine (TCOM) at UNT Health Science Center tied for 39 on the list with Brown University, Wake Forest, and University of Nebraska. This is the first time this survey has ranked the health science center in the top 50 medical schools. However, the magazine has ranked the community health degree program at the center's School of Public Health since 2000. That specialty survey was not updated this year.

"The Texas College of Osteopathic Medicine was originally founded to train primary care physicians, and we've long been a leader in this area," said Marc B. Hahn, D.O., dean of TCOM at the Fort Worth academic medical center. "This recognition by our peers is yet another indication of the quality of our physician graduates."

These rankings of the medical schools are based on the results of surveys sent to deans and senior faculty of the 144 medical schools in the United States and to residency program directors, as well as other criteria such as student selectivity and faculty resources.

A complete copy of the survey results is available online at www.usnews.com.

New Prescription Requirements

Method to Prohibit Generic Substitution Changes

The 77th Texas Legislature passed S.B. 768, which made significant changes to the generic substitution section of the Texas Pharmacy Act. Included in the changes are the elimination of the requirement that a prescription be on a two-line prescription form, and the requirement that the Board of Pharmacy adopt rules to provide a "dispensing directive" by which the prescriber will instruct pharmacists on substitution instructions. This portion of the law becomes effective June 1, 2002. Physicians are advised to be aware of the following changes.

Prohibiting Substitution on a Written Prescription

This is the major change in the substitution law: Effective June 1, 2002, the physician must write in his/her own handwriting the words, "Brand Necessary" or "Brand Medically Necessary" on the face of a written prescription. These instructions must be manually written – not preprinted, rubber stamped, or otherwise reproduced on the prescription form. The change in law eliminates the requirement that all prescriptions be written on a two-line prescription form. In addition, two-line prescription forms, check boxes, or other notations on an original prescription drug order, which indicate "substitution instructions," are not valid methods to prohibit substitution, and a pharmacist may substitute on these types of written prescriptions.

Multiple prescriptions on one form – In the case of multiple prescription orders on one prescription form, the physician must clearly indicate to which drugs the dispensing directive ("brand necessary") applies. If not clearly indicated, the pharmacist may substitute on all prescriptions on the form.

Two-line Prescription Form No Longer Necessary

As noted above, a two-line prescription form is no longer required as of June 1. Although a format is not specified, the Texas State Board of Pharmacy encourages physicians to use a form that contains:

- A single signature line for the physician; and
- The following reminder statement may be printed on the face of the prescription: "A generically equivalent drug product may be dispensed unless the prescriber hand writes the words 'Brand Necessary' or 'Brand Medically Necessary' on the prescription."

(Note: Although a prescription format is no longer required, prescriptions issued by APNs and PAs must still conform to the requirements specified in Section 157.056 of the Medical Practice Act.)



Use of the two-line form after June 1 - If a written prescription was issued prior to June 1 but is filled on or after June 1, the pharmacist must follow the substitution instructions on the prescription.

Refills for prescriptions issued on the two-line prescription format prior to June 1 will follow the original substitution instructions, unless otherwise indicated by the physician, including prescriptions issued prior to June 1.

Indicating the Dispensing Directive on Verbal, Faxed, and Electronic Prescriptions

Verbal prescriptions

To prohibit substitution, a physician (or designated agent) must tell the pharmacist "brand necessary" or "brand medically necessary." The pharmacist must note any substitution instructions on the file copy of the prescription drug order. If a physician fails to give verbal instructions, the pharmacist may substitute a generically equivalent drug product.

If the verbal prescription is to be reimbursed through the Medicaid program, the physician must clearly indicate that the brand is necessary when the prescription is communicated; AND fax or mail a copy of the original prescription drug order with the words "brand necessary" or "brand medically necessary" on the face of the prescription to the pharmacy within 30 days.

Electronic prescriptions

To prohibit substitution, "brand necessary" or "brand medically necessary" must be noted on the electronic prescription drug order.

If the electronic prescription is to be reimbursed through the Medicaid program, the physician must indicate that the brand is necessary on the electronic prescription pad, AND fax or mail a copy of the original prescription drug order with the words "brand necessary" or "brand medically necessary" hand written on the face of the prescription.

A complete copy of the rules, *Chapter 309 – Generic Substitution*, can be obtained from the Texas State Board of Pharmacy web site <www.tsbp.state.tx.us> under "Latest News and Updates."

REVISIONS FROM THE TEXAS WORKERS' COMPENSATION COMMISSION

Revised Doctor Training and Registration Requirements

ADL Registration/Application

New legislation and TWCC rules require that on or after September 1, 2003 all doctors who participate in the Texas workers' compensation system be on the Commission's Approved Doctor List (ADL). All doctors who wish to participate in the system, including those currently on the ADL, will be required to:

- File an application;
- Complete basic training; and
- Provide financial disclosure.

A doctor who fails to meet these requirements will be removed from the ADL on September 1, 2003.

Basic TWCC-prescribed training will cover the requirements of the Texas workers' compensation system including things such as:

- roles and responsibilities of doctors;
- efficient utilization of care;
- preauthorization requirements;
- return-to-work practices;
- maximum medical improvement;
- entitlement to benefits; and
- other relevant workers' compensation topics.

The Commission is currently anticipating making the basic training available through self-study beginning this summer and expects to begin accepting ADL applications and financial disclosure statements in January of 2003.

Impairment Evaluation Authorization

On or after September 1, 2003, only doctors who have been certified by the Commission will be permitted to evaluate the permanent impairment of a Texas workers' compensation claimant (unless the Commission grants permission on an exception basis).

To become authorized as an Impairment Evaluating Doctor, the doctor must:

- meet the ADL application and training requirements;
- complete Commission-prescribed training in the evaluation of permanent impairment (IR training); and
- pass the Commission-prescribed Impairment Evaluation Skills Examination (IR exam).

The IR training and IR exam requirements also apply to ancillary health care providers who conduct the range of motion, strength, and sensory testing for Impairment Evaluating Doctors. On or after September 1, 2003 doctors and ancillary health care providers who fail to meet these requirements will not be authorized to evaluate the permanent impairment of a Texas workers' compensation claimant.

If a doctor has completed the TWCC-approved IR Training (previously designated doctor training, currently available to all

doctors) since January 1 of this year, the doctor has met the IR training requirement, but, prior to receiving authorization as an Impairment Evaluating Doctor (and being permitted to evaluate impairment on or after September 1, 2003), will be required to:

- pass the IR exam, and
- meet the ADL application and training requirements.

A list of opportunities to attend the required Commission-prescribed IR training is available on the Commission's website at <www.twcc.state.tx.us> or interested parties may call Medical Benefits Customer Services at 512-804-4800, option 6.

Alternative Impairment Evaluation Training

As an alternative to taking the Commission's prescribed impairment evaluation training, doctors may, with Commission permission, substitute other similar training for the initial required IR training. To request approval for alternate impairment evaluation training, the doctor or ancillary health care provider must submit:

- the date of training;
- the name of the organization providing the training;
- the names of the educators conducting the training;
- CME accreditation/hours established for the training;
- an outline of the curriculum; and
- a certificate of completion.

Doctors and ancillary health care providers requesting approval for alternate impairment evaluation training must send the request to: Medical Benefits Services, Texas Workers' Compensation Commission, 4000 S. IH 35, Austin, Texas 78704. The Commission will notify the doctor or ancillary provider of the approval or denial of the alternate training.

In addition to being authorized as an Impairment Evaluating Doctor, a doctor must meet the training and application requirement to be included on the Commission's Approved Doctor List (ADL) as laid out in Rule 180.20 (relating to the Commission's Approved Doctor List) and Rule 180.23 (relating to Commission Required Training for Doctors/Certification Levels). Doctors who complete the impairment rating training and IR skills examination will not be authorized to evaluate permanent impairment for Texas workers' compensation claimants on or after September 1, 2003 unless they are on the ADL.

Interested parties should refer to newly adopted Rules 180.20-180.23 for the application and training requirements for doctors. As noted, the Commission anticipates that the ADL doctor training and IR skills examination will be available beginning in the summer of this year. To minimize interruption to a doctor's practice, the Commission is preparing to make the ADL training and application available via the Internet and by correspondence. The IR skills examination will be offered through our approved IR trainers.

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- *How You Can Stay on the Right Side of the Law: Beginning, Maintaining and Ending Physician/Hospital Relationships*
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For more information, please visit the TMLT web site at www.tmlt.org or call (800) 580-8658.



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