May 2011 Vol.25

No.5



Health Hunters Newsletter Aservice of the Riordan Clinic, cofounded in 1975 by Olive W. Garvey and Hugh D. Riordan. The Riordan Clinic is a not-for-profit 501(c)(3) corporation.

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We are offering a **Buy One/Get One 50% off** special on our nutrient IV's for a very limited time. Call **316 682 3100** by Friday 5/6/11 to schedule appointments for two IV's (one appointment must be on Tuesday 5/31) to receive this special **Buy One/Get One 50% off** offer. Space is limited to the first 35 callers.

(Offer must be mentioned at the time appointments are scheduled to redeem. Limited to one offer per person. Offer on IV services only. Cannot be combined with any other offer, coupon or promotion. No cash value.) **May is National Arthritis Awareness Month.** Because arthritis is considered an inflammatory disorder, this month's issue of the *Health Hunters Newsletter* is dedicated to educating you on inflammation, the pros and cons of inflammation and how we all can decrease the inflammatory response within our bodies. Arthritis actually means "inflammation of the joint." The suffix "itis" indicates that a word refers to an inflammatory disorder. Many illnesses, both acute and chronic, are characterized by excess inflammation. Some examples include: appendicitis, bronchitis, bursitis, colitis, endocarditis, hepatitis, cystitis, sinusitis, tonsillitis, tendonitis, etc. Read on to learn more about inflammation and how to get control of it within your own body! —Dr. Jennifer Kaumeyer

Inflammation and You By Ron Hunninghake, M.D.



When we cut ourselves, we expect the cut to heal. This is due to a finely orchestrated sequence of events called "inflammation." Pain, swelling, and redness are the cardinal signs of inflammation.

With the injury, cytokines (cell signaling proteins) are released to tell the body where the problem is and that immediate attention is needed. White blood cells migrate through the blood vessels. Invading germs are detected and engulfed. Dead skin cells are scavenged away. New fibro-blasts grow into the cut and seal it. The whole process from start to finish is a marvelous, symphonic healing event.

Healthy inflammation is not only desirable, it is essential to our survival. It is a localized, visible phenomenon that ends when the injury is healed. However, science is beginning to alert us to a more sinister, dark side of inflammation. This "unhealthy inflammation" is silent and systemic; it perpetuates itself far beyond the triggering injury event. Unhealthy inflammation appears to actually speed up wear-and-tear on vital organs. Many scientists now believe it underlies accelerated aging and degenerative organ decline.

Unhealthy inflammation sets the stage for osteoarthritis, allergic rhinitis, gastritis, colitis, chronic dermatitis, osteoporosis, arteriosclerosis (vascular disease leading to heart attack and stroke), Alzheimer's, and even some cancers. We associate many of these chronic illnesses with aging.

Research suggests that the very process of aging itself may involve unhealthy inflammation. And yet, not everyone ages at the same rate. Even though we are all exposed to the environmental factors that trigger inflammation, we are not affected in the same way. Not everyone gets allergic rhinitis or chronic dermatitis. What then predisposes one and not another to unhealthy inflammation? Cytokines! Remember, these are the cell-signaling proteins that activate macrophages and other immune cells. These cytokines are highly pro-inflammatory. Rheumatologists report that cytokines, such as tumor necrosis factor alpha and interleukin-6, can hang around even after the injury event has long since healed. For unknown reasons, the body continues to produce cytokines causing the once protective



Letter from the Editor:

by Amanda Hawkinson

In honor of National Arthritis Awareness Month, this issue of the *Health Hunters Newsletter* focuses on raising arthritis awareness in our community. Arthritis is a condition characterized by inflammation of the joints. According to the Arthritis Foundation, 46 million Americans have arthritis, including 300,000 children. Our goal is to inform our readers about the natural options available to treat and prevent this chronic, inflammatory disease.

In addition to information about arthritis and inflammation, be sure to note the dates of the upcoming Lunch & Lectures. Also, take the opportunity to get your body moving in May by signing up for our new yoga class. Check out the article about the contributions volunteers make at the Riordan Clinic; we couldn't do it without them.

The Riordan Clinic has a 35 year history of providing help, hope and healing to patients with arthritis and other chronic illnesses. If you suffer or believe you might be suffering from arthritis, call 316 682 3100 and make an appointment with a Riordan Clinic physician today.

If you have any questions, comments, or concerns, you may e mail me at newseditor@riordanclinic.org. I hope you enjoy this issue.

For more information on upcoming events and Riordan Clinic specials, please take a look at our website www.riordanclinic.org and don't forget to "Like" us on Facebook.

> Thank you for reading! Amanda Hawkinson Editor newseditor@riordanclinic.org

Inflammation and You continued from page 1...

inflammation to become destructive. Unfortunately, this often happens in a silent, hidden way. By the time it is discovered, major damage has already occurred. A good screening test to uncover the presence of renegade cytokines is the High Sensitivity C-Reactive Protein (hs-CRP) blood test. This relatively inexpensive test measures a by-product of interleukin-6. Results can "quantify" unhealthy inflammation, alerting you to the presence of a correctable dysfunction in the body. In a recently published *New England Journal of Medicine* article, it was reported that people with elevated CRP are three times as likely to die from sudden heart attack as those without elevated CRP.

These findings demonstrate that inflammation is an important component of heart disease and arteriosclerosis (vascular disease). Daily aspirin, in addition to reducing platelet stickiness and the likelihood of artery-plugging clots, may reduce the inflammatory component of arteriosclerosis. Having established that unhealthy inflammation is caused by excessive proinflammatory regulators, we are still left with the nagging question: why do we have excessive pro-inflammatory regulators?

Evidence is now accumulating that a major change in the human diet may be silently shifting our immune systems into a dangerous pro-inflammatory state. In 1985, a landmark article was published in the *New England Journal of Medicine* by Dr. S. Boyd Eaton. The article presented a vast body of anthropologic and archeological evidence that characterized the composition of our ancestral diet, which I will refer to as the Ancient Diet. This diet, when analyzed by modern standards, has definite advantages over later diets adopted by the human race. In the following chart, I have summarized these nutritional advantages and how major shifts in our civilization have undermined these advantages.

DIET	ANCIENT	AGRICULTURAL	INDUSTRIAL	FAST FOOD
% WHOLENESS	100%	90%	65%	35%
OMEGA 6: OMEGA 3 RATIO	1:1	5:1	10:1	20:1
GLYCEMIC INDEX	VERY LOW	MEDIUM	HIGH	VERY HIGH
*ORAC SCORES	HIGH	MEDIUM	LOW	VERY LOW

*ORAC (Oxygen Radical Absorbance Capacity)

• % Wholeness: As you can see, % wholeness has progressively dropped as civilization has advanced. As wholeness drops, nutrient density drops. A kind of hidden malnutrition develops progressively.

• Omega 6: Omega 3 Ratio: The rising omega 6:3 ratio simply means that our intake of omega 3 essential fatty acids, which is anti-inflammatory in nature, has dropped in favor of rising intake of omega 6, which is pro-inflammatory in nature. The optimal ratio would be 5:1

• Glycemic Index: The glycemic index is a marker of the rate at which carbohydrates are absorbed. High glycemic index foods act like sugar and put a tremendous strain on the pancreas. Syndrome X, hyperlipidemia, obesity, type II diabetes, and high blood pressure all stem from excessive high glycemic index foods.

• ORAC Score: The ORAC score was introduced by the U.S. Dept. of Agriculture as a measure of the antioxidant properties of certain foods. As fruit and veggie intake goes down, so does the ORAC score. Part of a pro-inflammatory matrix includes poor control of free radical damage in the body.

So what are we to do to stop this trend towards a more and more severe pro-inflammatory state? Jack Challem, who happens to be our May Lunch & Lecture speaker, has developed fourteen antiinflammatory dietary principles that can reverse this dangerous tide.

- 1. Eat a variety of fresh and whole foods.
- 2. Eat more fish, especially coldwater varieties.
 3. Eat grass-fed, lean meats and game meats.
- 4. Eat a lot of colorful vegetables.
- 5. Use spices and herbs to flavor your foods.
- 6. Use olive oil as your primary cooking oil.7. Identify and avoid food allergens.
- 7. Identify and avoid food allerge

- 8. Avoid conventional vegetable cooking oils.
- 9. Avoid or limit intake of all refined sugars.
- 10. Avoid or limit intake of refined grains.
- 11. Limit intake of dairy products.
- 12. Snack on nuts and seeds.
- 13. When thirsty, drink water.
- 14. When possible, eat organically raised foods.

Even adopting just one or two of these dietary principles will go a long way in reducing your personal CRP score and your risk of future degenerative illness.

Patient Profile By Carey West, RN

In the summer of 2003, a 62 year old man came to the Riordan Clinic discouraged and bothered by the aching and occasional swelling of his hands, feet, knees, hips, and shoulders. His hands bothered him the most, preventing him from opening bottles and jars. He had limited range of motion in his shoulders and feet. To try and achieve a higher level of functioning and to control his pain, he was taking ibuprofen multiple times a day. He was seeking some relief.

The patient was advised that he had rheumatoid arthritis. At the Riordan Clinic, tests were performed to confirm the diagnosis and to determine the severity and current status of the disease. Based on the test results, the doctor prescribed several natural antiinflammatories such as MSM, Entero Pro, Omega 3, and Pro EFA. He also started taking as much oral Vitamin C as he could tolerate and started Vitamin C infusions as his schedule would allow.

By the end of summer, the patient reported that his knees and hips were almost pain free! His hands were still giving him some discomfort; they were slightly swollen, sore, and weak on occasion, but he reported that he had taken only five ibuprofens in the last month. By January of the following year, the patient was feeling great with no complaints of pain! He said his fingers were stiff in the morning, but he would loosen them up with range of motion exercises. He had regained all normal functioning and stopped using ibuprofen completely.

In the interim seven years, the patient has continued to visit the Riordan Clinic every six-months to maintain his health. He has maintained his natural antiinflammatory supplement regimen and has retained his normal functioning.

If you have chronic health issues, make an appointment today by calling 316-682-3100. The health, hope, and healing we provide can make a positive impact in your life, just as it did for this patient.

ARTHRITIS FOUNDATION® Take Action against Arthritis

May is National Arthritis Awareness Month and the Arthritis Foundation is working to inform the public of the benefits of physical activity to ease the pain of arthritis or to prevent some forms from developing. Their 2011 message is "take action." For the estimated 46 million adults and nearly 300,000 children with arthritis in the U.S., movement is the best medicine to prevent and limit the impact of arthritis. The Arthritis Foundation recommends 30 minutes of daily exercise to help defend against arthritis or to control arthritis pain. Exercise helps strengthen muscles around joints, thereby providing better joint support and protection as well as enhancing flexibility. Read below for 10 ways you can protect your joints, and use the month of May to make choices and take action so you can better live and cope with arthritis.



10 Ways You Can Protect Your Joints

Osteoarthritis (OA) is the most common form of arthritis, with nearly 27 million Americans living with it today. No longer considered just a consequence of aging, researchers now have several candidates when looking for a cause: musculoskeletal defects, genetic defects, obesity, or injury and overuse.

While you may not be able to control a genetic trait or knock knees, there are some definite actions you can take to protect your joints and help prevent OA.

- 1. Maintain your ideal body weight. The more you weigh, the more stress you are putting on your joints, especially your hips, knees, back and feet.
- 2. Move your body. Exercise protects joints by strengthening the muscles around them. Strong muscles keep your joints from rubbing against one another, wearing down cartilage.
- 3. Stand up straight. Good posture protects the joints in your neck, back, hips and knees.
- 4. Use the big joints. When lifting or carrying, use your largest and strongest joints and muscles. This will help you avoid injury and strain on your smaller joints.
- 5. Pace yourself. Alternate periods of heavy activity with periods of rest. Repetitive stress on joints for long periods of time can accelerate the wear and tear that causes OA.
- 6. Listen to your body. If you are in pain, don't ignore it. Pain after activity or exercise can be an indication that you have overstressed your joints.
- 7. Don't be static. Changing positions regularly will decrease the stiffness in your muscles and joints.
- 8. Forget the weekend warrior. Don't engage in activities for which your body isn't prepared. Start new activities slowly and safely until you know how your body will react to them. This will reduce the chance of injury.
- 9. Wear proper safety equipment. Don't leave helmets and wrist pads at home. Make sure you get safety gear that is comfortable and fits appropriately.
- 10. Ask for help. Don't try to do a job that is too big for you to handle. Get another pair of hands to help out.

Source: The Arthritis Foundation's website, Arthritis.org.

HCG Weight Loss Intervention— The Success continues!

Since introducing the HCG Weight Loss Intervention program in January, participants have lost over 1,550 pounds! Here is one success story: A 60 year old man, weighing 300.4 pounds with a 55.5" waist, began the HCG Weight Loss Intervention program on March 2, 2011. As a case worker, his job is very emotionally demanding and entails working mostly with the underprivileged, as well as many patients who are on hospice. As many of us have experienced, job stress can add to the challenge of losing weight.

He meets with our HCG nurse weekly, bringing the food tracker neatly charted with information of not only foods that he has eaten throughout the week, but a record of the emotions he was feeling along the way. In his personal life, he has experienced some lack of support for his weight loss journey. Through voicing his concerns about this issue, he realized he has lost weight and improved communication in key relationships.

To date, he has lost a total of 35.5 pounds and 4.25" off his waist. He recently expressed his amazement at not being hungry at all. He plans to start another HCG Weight Loss Intervention cycle to continue working towards his ultimate goal of losing 60 pounds.

This patient is a great example of the weight loss success that awaits you with the Riordan Clinic HCG Weight Loss Intervention. Go to www.riordanclinic.org for additional information. If you are ready to improve your health and well being call 316 682 3100 to get started today!



A GOOD HOME FOR ORGANIC PRODUCE!

For the last 10 years, the Riordan Clinic has maintained an on-site garden as part of our long-standing mission to "...stimulate an epidemic of health." The treatment philosophy at the Riordan Clinic starts with the recommendation of eating a whole-foods diet with lots of colorful fruits and vegetables, which will assist in putting you on the road to better health. Our garden is one of the ways we live our mission.

The garden is operated according to the USDA National Organic Program standards, although we don't spend the money to have the garden "officially" certified. We plant a wide variety of produce and have a dedicated staff that tends the soil, including full-time and parttime employees and clinic volunteers. Our goal is to partner with a local restaurant or grocery store to purchase our organic garden bounty! If you are interested in this opportunity, or know someone who is, please call Donna at 316-927-4707 or email dkramme@riordanclinic.org.

Yoga in the Pyramid!

Class: Vinyasa Power Yoga—This eight-week class is a mindful flow from one posture (asana) to another using breath-synchronized movement. The class involves many vinyasas (lots of movement) and focuses on balance and strength. The teacher will offer pose modifications for students who prefer to move at a slower pace.

Teacher: Leigh Ann Ablah is a Yoga Alliance Member and has completed RYT 200 HR Certified Yoga Teacher Training. In addition to private classes, Leigh Ann teaches at the YMCA, WSU Heskett Center and conducts a children's yoga class at Watermark Books on Sundays. Leigh Ann has been practicing yoga for several years and is continually progressing in her own practice by attending numerous workshops.

Wednesdays 5:30-6:30 p.m. Starting 5/18/11-7/13/11

Cost: \$70 for 8-wk session, \$10 per drop-in class. Call **316-927-4723** to reserve your spot or email reservations@riordanclinic.org.

Location: Riordan Clinic, **3100 N. Hillside, Wichita, KS 67219**. Classes will be in the pyramid on the Riordan Clinic grounds or outside on our serenity deck, as weather permits.

Equipment: Please bring a yoga mat, towel, water, and proper exercise apparel.

Yoga is good for what ails you! Research shows that yoga helps manage or control anxiety, arthritis, asthma, back pain, blood pressure, carpal tunnel syndrome, chronic fatigue, depression, diabetes, epilepsy, headaches, heart disease, multiple sclerosis, stress and other conditions and diseases. What's more, yoga:

- Improves muscle tone, flexibility, strength and stamina
- Reduces stress and tension
- Boosts self esteem
- Improves concentration and creativity
- Lowers fat
- Improves circulation
- Stimulates the immune system
- Creates a sense of well-being and calm



Wow—who couldn't use those benefits?! Come to the new yoga class at the Riordan Clinic and reap the proven benefits of this wonderful exercise.

Know Your Nutrients —*MSM (Methylsulfonylmethane) By Tiffany Hurley

In recognition of National Arthritis Awareness Month, we are featuring a nutrient that Riordan Clinic doctors regularly recommend to assist with inflammation and arthritis.

MSM is a naturally occurring sulfur compound found in small amounts in many foods, such as meats, dairy products, and fresh fruits and vegetables. As a dietary supplement, MSM is synthesized and contains 34% sulfur by weight. MSM contains vital building blocks for joints, cartilage, skin, hair, nails and methyl groups, which support many vital biochemical processes in the body, including energy production. It can be taken alone or in combination with other joint health supplements, such as glucosamine and chondroitin.

MSM is often used for pain and inflammation associated with osteoarthritis, rheumatoid arthritis, gout, and fibromyalgia, and scientific studies have confirmed that MSM is a safe and effective anti inflammatory agent. It can also help with liver detoxification. MSM is thought to work by delivering sulfur to the body in a usable form. While more research is needed to determine how the body absorbs the sulfur it needs from MSM, preliminary studies suggest that the sulfur in MSM is incorporated into proteins and into joint tissues. Sulfur strengthens the tissues that make up the joint and is critical in good joint health.

If you are experiencing joint pain, inflammation or arthritis, MSM could help vou. Call 316 682 3100 to schedule an evaluation with a Riordan Clinic doctor to discuss how a supplement regimen could help you.

To learn more about MSM, visit the Mabee Library at the Riordan Clinic to view the Lunch and Lecture DVD by Dr. Ron entitled MSM : 14 Days to Natural Pain Relief and Expanded Wellness.

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.



Riordan Clinic Volunteers Celebrated

National Volunteer Appreciation Week was April 10–16, 2011. The Riordan Clinic celebrated its loyal volunteers by hosting a luncheon. Volunteers and staff gathered to highlight the accomplishments of the past year.

Riordan Clinic volunteers gave 2,226 hours of their time in 2010! Following are the awards presented to recognize some important milestones.

Number of hours volunteered in 2010

Nancy Bramhall: 166 hours Jere Woodard: 190 hours Nancy Toben: 269 hours

Kay Mayer: 286 hours Jo Ann Baugh: 312 hours Carolyn Mitchell: 321 hours

Number of cumulative hours given to the Clinic Lou Morse: 500⁺ hours Jo Ann Baugh: 3,000⁺ hours Nancy Bramhall: 1,000⁺ hours

Number of years of volunteer service Lou Morse: 5 Years Bob Alford: 10 years Nancy Toben: 5 years

Our volunteers are a remarkable, dedicated team. Thank you for all you do!

VITAMIN SPECIAL—MSM **15[%] SAVINGS**



(CAPSULES) Sale Price \$ 33.16 (CAPSULES)

Sale Price \$19.99 (200g POWDER)

(2lb POWDER)

Sale Price \$47.34 (2lb POWDER)

THESE OFFERS EXPIRE 5/31/2011

Laboratory Testing Offer

As Dr. Ron mentions in this month s lead article "Inflammation and You," a High Sensitivity C Reactive Protein (hs-CRP) blood test is a useful screening test for inflammation. While the hs CRP test is not specific enough to diagnose a particular disease, it does serve as a general marker for inflammation. Current thinking is that hs CRP can play a role in the health evaluation process before one encounters a serious inflammation related health problem.

C reactive protein (CRP) is a molecule produced in response to inflammation, which occurs when the body is exposed to trauma or infection. CRP is not only produced within the liver but also appears to be produced in both visceral fat and within coronary vessels. Thus it can also be an indicator of cardiovascular disease.

The amount of CRP produced by the body varies from person to person and is affected by an individual s genetic makeup and lifestyle. Higher CRP levels tend to be found in individuals who smoke, have high blood pressure, are overweight and don't exercise. Conversely, lean, athletic individuals tend to have lower CRP levels.



If you'd like to know more about the level of inflammation in your body, call 316 684-7784 to schedule an hs CRP test today.

Riordan Clinic Volunteers Needed

Would you like to become part of the Riordan Clinic volunteer team? We are looking for volunteers who would enjoy working with our garden staff in our large organic garden and in several small flower gardens.

Please contact Tiffany Hurley at thurley@riordanclinic.org or 316-682-3100 ext. 331 to receive a volunteer application.

Lunch and Lecture Series 2011 HCG Weight-Loss—The Truth about Prescription vs. Homeopathic HCG

Speakers: Dr. Ron Hunninghake and **Dr. Jennifer Kaumeyer** Tuesday, May 10, 2011 12:00 p.m. to 1:00 p.m. 6:00 p.m. to 7:00 p.m. **Cost:** FREE (Feel free to bring a "brown bag" lunch; lunch will NOT be provided.)



You've heard the hype about HCG weight-loss, now come and learn the facts from the doctors at the Riordan Clinic. HCG weight-loss programs continue to increase in popularity, but not all programs are created equal. There are critical differences between the HCG you can buy overthe-counter at the health food store and the doctor prescribed HCG we use with the Riordan Clinic program.

The Riordan Clinic HCG Weight-Loss Intervention is physician supervised; your health and wellbeing are our top priority. You'll be monitored by a registered nurse, receive a blood test to accurately identify any health issues, and most importantly, you'll receive prescription HCG. Educate yourself on the shortcomings of the do-it-yourself HCG programs you find on the internet.

If you are serious about addressing your weight issues to avoid potential weight-related chronic illness in the future—this Lunch & Lecture is for you. We will look forward to seeing you on Tuesday, May 10th to learn about this important topic.

For reservations: call 316-927-4723 or email us at reservations@riordanclinic.org

No More Fatigue by Jack Challem



Jack Challem



Presenters: Jack Challem and Dr. Ron Hunninghake Thursday, May 19, 2011 12:00 p.m. to 1:00 p.m. Cost: \$15—Lunch is included.

Stressed out and tired all the time? Seems as though nearly everyone feels that way! Fatigue is the cause but there is help!

Jack Challem, author of No More Fatigue, and our own Dr. Ron Hunninghake will present a Lunch & Lecture on this topic on Thursday, May 19, 2011 at 12:00 p.m. They will explain the five circles, or causes, of fatigue including: stress, poor eating habits, hormone imbalances, illness and aging.

In addition to the causes of fatigue, they will review dietary changes and supplement regimens that can help you get your energy back to enjoy life. They will also make suggestions for getting a better night's sleep and describe easy ways to become more physically active.

If you are sick and tired of being sick and tired—this Lunch & Lecture is for you. We will look forward to seeing you on Thursday, May 19th to learn about this important topic.

Jack Challem Biography: Jack Challem, who publishes The Nutrition Reporter™, is a personal nutrition coach and one of America's most trusted health writers. He is a member of the American Society for Nutrition and the best-selling author of more than 20 books, including No More Fatigue, Stop Prediabetes Now (with the Riordan Clinic's, Dr. Ron Hunninghake), The Food-Mood Solution, The Inflammation Syndrome, Feed Your Genes Right, and Syndrome X. Jack is a columnist for the journal Alternative & Complementary Therapies and serves on the editorial board of the Journal of Orthomolecular Medicine. His scientific articles have appeared in Free Radical Biology & Medicine, Journal of Orthomolecular Medicine, Medical Hypotheses, and other journals. Jack is frequently a speaker at nutritional medicine conferences and to consumer health groups.



For reservations: call 316-927-4723 or email us at reservations@riordanclinic.org





The independent newsletter that reports vitamin, mineral, and food therapies

Fructose and Soft Drink Consumption Linked to Hypertension, Other Diseases

One of the most dangerous food additives might surprise you – fructose, which is found in corn syrup and high-fructose corn syrup. The latest study shows a strong link between fructose consumption and high blood pressure, and it adds to a growing body of research implicating fructose in overweight, diabetes, heart disease, and liver dysfunction.

Most people think of fructose as fruit sugar. While it is found in fruits, most dietary fructose (which is synthesized from corn) now comes from soft drinks, bakery products, sweets, and a variety of other processed food products.

The latest study, by Diana I. Jalal, MD of the University of Colorado Denver Health Sciences Center, analyzed the relationship between fructose consumption and hypertension in 4,528 adults. The subjects' average fructose consumption was 74 grams daily, equivalent to the amount found in two and one-half soft drinks.

People who consumed more than 74 grams of fructose daily had a significantly higher risk of high blood pressure. People who consumed the most fructose had a 77 percent greater risk of very high blood pressure -160/100 mmHg.

Meanwhile, William Nseir, MD, of Holy Family Hospital, Nazareth, Israel, and his colleagues reviewed the medical evidence linking fructose and soft drinks to fatty liver disease.

Nseir wrote that fructose promotes lipogenesis – fat production – in the liver. The problem is compounded by caramel coloring in colas, which are rich in advanced glycation end products (AGEs – see the July issue of *The Nutrition Reporter*), which in turn increase insulin resistance and inflammation.

Nseir cited other evidence detailing how fructose increases liver concentrations of triglyceride and cholesterol, leading to a reduction in liver function. Fructose consumption is also strongly associated with obesity. Nseir also explained that while fructose does not usually affect glucose tolerance in the short term, large amounts do seem to increase the risk of diabetes and kidney disease.

Finally, a recent animal study by Ronaldo P. Ferraris, PhD, of the New Jersey Medical School, Newark, found that large amounts of dietary fructose inhibit calcium absorption and also leads to vitamin D deficiency, at least in cases of chronic kidney disease.

References: Jalal DI, Smits G, Johnson RJ, et al. Increased fructose associates with elevated blood pressure. *Journal of the American Society of Nephrology*, 2010;21:epub ahead of print. Nseir W, Nassar F, Assy N. Soft drinks consumption and nonalcoholic fatty liver disease. *World Journal of Gastro-enterology*, 2010;16:2579-2588. Douard V, Asgerally A, Sabbagh Y, et al. Dietary fructose inhibits intestinal calcium absorption and induces vitamin D insufficiency in CKD. *Journal of the American Society of Nephrology*, 2010;21:261-271.

Perspectives

Mixed Messages for Health Care

Two recent newswire stories caught my attention. One article noted that there will be a significant shortage of doctors as "baby boomers" hit their 60s and 70s. The other story noted that too much health care is unnecessary and harmful.

Am I the only one who saw a contradiction here?

The second story, sent to newspapers by the Associated Press, noted that "More medical care won't necessarily make you healthier—it may make you sicker." The article went on to report that as many as one in three medical tests and treatments aren't needed.

Fewer medical tests might not be a popular idea among people who keep asking their doctors to identify the cause and then to treat their aches and pains and other health problems. But I would agree, at least to an extent – conventional medical tests and treatments are overused, while nutritional assessments and treatments are sorely underutilized.

In the United States, medicine is a "for profit"



business, and most doctors earn a living through some sort of intervention, such as by prescribing a drug or doing surgery. When a patient asks for help, his expectation is that the doctor will do something. Of course, doctors are trained to intervene, and income is related to ordering more tests and doing more interventions. Sometimes the result is iatrogenic disease – physician-caused illness.

Although I believe most doctors are sincere and do want to help their patients, they also know the economic realities of medicine. But not everyone is so sincere. Some years back, I happened to be meeting with a hospital administrator on the morning the government announced that it was reducing Medicare payments to doctors. The administrator was livid. "Do you know what the doctors are going to do?" she asked rhetorically. "They've got big mortgages and boats and kids in college. They're just going to wheel in more patients so they (the docs) don't have to take a cut in income."

So, do we really need more doctors? Or unnecessary tests and treatments? Or do we need more doctors who think in terms of more efficient and lower cost nutritional therapies? -JC

Ample Vitamin E May Help Protect Against Alzheimer's

Two new studies have found that high levels of vitamin E are associated with a lower risk of Alzheimer's disease.

Elizabeth E. Devore, ScD, of the Erasmus Medical Center, Netherlands, and her colleagues investigated dietary and health data in 5,395 men and women age 55 and older. After an average follow up of almost 10 years, 465 of the participants were diagnosed with dementia. Of those, 365 were diagnosed with Alzheimer's disease.

People with the highest dietary intake of vitamin E were one-fourth less likely to develop either Alzheimer's disease or other types of dementia.

In the other study, Francesca Mangialasche, MD, of the Karolinska Institute, Sweden, and her colleagues analyzed the relationship between blood levels of total vitamin E and the eight chemical subfractions of the vitamin and the odds of developing Alzheimer's disease. Mangialasche focused on 232 men and women who were at least 80 years old. Fifty-seven of the subjects were diagnosed with Alzheimer's over the next six years.

High blood levels of total vitamin E were associated with a 45 percent lower risk of Alzheimer's disease. The four tocopherols and four tocotrienols that make up vitamin E also seemed to protect against Alzheimer's, but beta-tocopherol seemed to exert the greatest single benefit.

The human body preferentially selects for the d-alpha tocopherol form of vitamin E, but the other tocopherols and tocotrienols also have antioxidant effects. Mangialasche noted that vitamin E is the body's principal fat-soluble antioxidant, and that it plays an important role in protecting cell membranes. Damage to these membranes may be a factor in Alzheimer's.

"The protective activity of vitamin E seems to be related to the combination of different forms, rather than alpha-tocopherol alone," Mangialasche wrote.

Although most vitamin E is sold in the alphatocopherol form, some supplements contain a mix of tocopherols and tocotrienols.

References: Devore EE, Grodstein F, can Rooij FJA, et al. Dietary antioxidants and long-term risk of dementia. *Archives of Neurology*, 2010;67:819-825. Mangialasche F, Kivipelto M, Mecocci P, et al. High plasma levels of vitamin E forms and reduced Alzheimer's disease risk in advanced age. *Journal of Alzheimer's Disease*, 2010;20:1029-1037.

B Vitamins and Methionine May Reduce Risk of Lung Cancer

Men and women with high blood levels of vitamin B6, folic acid, and methionine had roughly half the risk of developing lung cancer, compared with people who had low levels of these nutrients.

Although the study showed an association – not a direct cause and effect – the researchers provided a rationale for why these vitamins might reduce the odds of developing cancer.

Paul Brennan, PhD, of the International Agency for Research on Cancer, Lyon, France, and his colleagues analyzed blood samples obtained in the 1990s from 385,747 people in 10 European countries. By 2006, 899 men and women had been diagnosed with lung cancer, and the researchers compared them specifically with 1,770 people who were matched by age, sex, and country.

Brennan reported that people with the highest blood levels of vitamin B6 had a 56 percent lower risk of lung cancer, regardless of whether they were former smokers, nonsmokers, or current smokers. Current and former smokers with high blood levels of folic acid had a 32 percent lower risk of lung cancer.

Some of the most striking benefits were among people with high blood levels of vitamin B6 and methionine (a protein building block). In this group, nonsmokers had a 44 percent lower risk, former smokers had a 49 percent lower risk, and current smokers had a 58 percent lower risk of lung cancer. Vitamin B6, folic acid, and methionine play roles in a biochemical process called methylation, which is known to keep cells from becoming cancerous. "Given their involvement in maintaining DNA integrity and gene expression, these nutrients have a potentially important role in inhibiting cancer development, and offer the possibility of modifying cancer risk through dietary changes," wrote Brennan.

Reference: Johansson M, Relton C, Ueland PM, et al. Serum B vitamin levels and risk of lung cancer. *JAMA*, 2010;303: 2377-2385.

Omega-3 Supplements Helpful in Treating 'Major' Depression

A study of 432 middle-age women and men has found that omega-3 supplements can ease major depression – the most severe type.

François Lespérance, MD, of the University of Montreal, Canada, and his colleagues gave the patients either omega-3 supplements or placebos for eight weeks. The supplements had a high ratio of eicosapentaenoic acid (EPA) to docosahexaenoic acid (DHA) – with the patients receiving 1,050 mg of EPA and 150 mg of DHA daily.

About half of the patients had severe anxiety in addition to depression, and 40 percent of the patients were also taking antidepressant medications. The omega-3 supplements led to slight overall improvements in people with depression and anxiety.

However, patients with major depression and no anxiety benefited the most. These patients had a "clear benefit" based on improved scores on two clinical tests used to assess the severity of depression.

Lespérance noted that his study was the largest to focus on omega-3s and major depression. Three smaller studies had found that high-EPA supplements were helpful in treating severe depression.

Reference: Lespérance F, Frasure-Smith N, St-André E, et al. The efficacy of omega-3 supplementation for major depression: a randomized controlled trial. *Journal of Clinical Psychiatry*, 2010; epub ahead of print.

Taking Fish Oil Supplements May Reduce Risk of Breast Cancer

A study of 35,000 women has found that people who take fish oil capsules have a significantly lower risk of breast cancer.

Emily White, PhD, of the Fred Hutchinson Cancer Research Center, Seattle, Washington, investigated whether dietary supplements were associated with a lower risk of breast cancer. The women in the study were between 50 and 76 years of age, and all lived in western Washington state. Between 2000 and 2007, women who were taking fish oil supplements were 32 percent less likely to be diagnosed with breast cancer. Women who had been taking fish oil capsules for 10 years showed a trend toward lower breast cancer risk.

Most of the risk reduction was related to a lower incidence of ductal cancer, the most common type of breast cancer. Women taking fish oil capsules had a 44 percent lower risk of ductal cancer. The fish oils did not appear to impact the risk of lobular breast cancer.

Other supplements, including black cohosh, dong quai, soy, and St. John's wort, were not associated with a lower risk of breast cancer.

Reference: Brasky TM, Lampe JW, Potter JD, et al. Specialty supplements and breast cancer risk in the vitamins and lifestyle (VITAL) cohort. *Cancer Epidemiology, Biomarkers & Prevention*, 2010;19:OF1-13.

Some Aches and Pains Linked to Low Levels of Vitamin D

A study of 3,075 men in eight European nations has found that chronic pain is often related to low levels of vitamin D.

John McBeth, PhD, of the University of Manchester, England, and his colleagues studied 3,075 men, ages 40 to 79 years. Almost 9 percent reported chronic widespread pain, and 50 percent described having other types of pain.

Men with chronic widespread pain had a 50 percent chance of low vitamin D levels, and those with other types of pain had a 30 percent chance of low vitamin D.

According to McBeth, "musculoskeletal pain problems" are a major global causes of disability, with about 33 percent of people having low-back pain and 10 percent having chronic widespread pain.

Vitamin D is needed for muscle development, and other research has found that the vitamin has mild analgesic properties.

Reference: McBeth J, Pye SR, O'Neill TW, et al. Musculoskeletal pain is associated with very low levels of vitamin D in men: results from the European male ageing study. *Annals of the Rheumatic Diseases*, 2010; doi 10.1136/ard. 2009.116053.

Pycnogenol[®] Supplements May Ease Allergic Rhinitis Symptoms

Pycnogenol, a antioxidant complex derived from French maritime pine trees, can help reduce the nasal discomfort caused by pollen allergies.

Dale Wilson, MD, of KGK Synergize, a Canadian company that conducts clinical trials, studied 60

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Quick Reviews of Recent Research

• Diet benefits people with type 2 diabetes Researchers from New Zealand studied 93 men and women with type 2 diabetes, all of whom had failed to decrease their glycated hemoglobin (HbA1c) to under 7% with pharmaceutical treatments. The subjects were given either intensive dietary advice or the "usual" diabetes care. After six months, people given the dietary advice had benefited from significant decreases in HbA1c, weight, body fat, and waist circumference. According to the researchers, the decrease in HbA1c was comparable to adding a new drug treatment.

Coppell KJ. BMJ, 2010;341:c3337.

• Vitamin D protects against colorectal cancer In an effort to identify factors that predict survival in colorectal cancer patients, Japanese researchers measured blood levels of vitamin D in 257 patients around the time of surgery. Only 3 percent of the patients had at least marginally adequate levels of vitamin D (30 ng/ml or higher), and the average vitamin D level among these patients was severely deficient (10 ng/ml). Higher vitamin D levels were associated with longer survival.

Mezawa H. BMC Cancer, 10:347; doi 10.1186/1471-2407-10-347.

• Aloe cream eases hemorrhoid surgery pain Physicians from Iran gave either a cream

containing *Aloe vera* or a placebo to 49 patients who had undergone surgery for hemorrhoids. The patients

Pycnogenol Helpful in Allergies...

people, ages 18 to 65, who were allergic to birch tree pollen. The subjects were asked to take either a 50 mg Pycnogenol tablet or placebo twice daily three to eight weeks before the onset of birch pollen season.

"The best results were found with subjects who took Pycnogenol seven to eight weeks ahead of the allergy season," wrote Wilson of the London, Ontario company.

Overall, people taking Pycnogenol had a 19 percent increase in immunoglobulin E (IgE), a marker of allergic sensitivity, compared with a 32 percent increase among those taking placebos.

People in the study also filled out a questionnaire about their symptoms. Those who took Pycnogenol had fewer nasal and eye symptoms, compared with people taking placebos.

Reference: Wilson D, Evans M, Guthrie N, et al. A randomized, double-blind, placebo-controlled exploratory study to evaluate the potential of Pycnogenol® for improving allergic rhinitis symptoms. *Phytotherapy Research*, 2010: doi 10.1002/ ptr.3232.

were asked to apply the cream to the surgical site three times daily for 28 days. Patients using the *Aloe vera* cream had significantly less pain 12 hours, 24 hours, 48 hours, and two weeks after surgery, compared with those who used the placebo cream. They also had significantly less need for analgesic drugs 12 hours after surgery. In addition, patients using the *Aloe vera* cream had healed significantly after two weeks.

Eshghi F. Journal of Alternative & Complementary Medicine, 2010;16:647-650.

Olive oil turns off inflammation genes

Spanish researchers asked 20 patients with metabolic syndrome to eat two similar low-fat, carbohydrate-rich breakfasts. Both breakfasts contained olive oil, but one was rich in phenolics (a family of antioxidants) and the other was low in phenolics. The high-phenolic olive oil reduced the activity of 79 genes, many of which are known to stimulate inflammation through a variety of biochemical pathways, including nuclear factor kappa beta and arachidonic acid.

Camargo A. *BMC Genomics*, 2010;11:253; doi 10.1186/1471-2164-11-253.

• Herb appears as good as drug for prostate

Extracts of saw palmetto (*Serenoa repens*) berries have long been used as an herbal treatment for benign prostate enlargement, a condition that affects most men after age 50. A Spanish researcher confirmed the benefits of saw palmetto using a proprietary extract in a laboratory study. The extract inhibited an enzyme, 5 alpha reductase, involved in converting testosterone to 5 alpha-dihydrotestosterone, which promotes prostate enlargement. The effect of the saw palmetto extract was equal to that of the drug finasteride.

Pais P. Advances in Therapy, 2010;27: doi 10.1017/ s12325-010-0041-6.

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