



**Weatherhead P.E.T. Center for Preventing and Reversing Atherosclerosis
The University of Texas-Houston Medical School and Memorial Hermann Hospital**

From the Medical Director



This third issue of PET News marks the evolving success of the diagnostic and treatment programs of the Weatherhead PET Center for Preventing and Reversing Atherosclerosis. Following the National PBS broadcast TO HEAL A HEART, we received a hundred calls per day to which we had difficulty responding within a reasonable time.

Interest surged again on January 13, 2002 after a seven page feature in the Sunday Houston Chronicle Texas magazine covering our program titled "A Maverick at Heart". My staff and I are deeply touched by those of you who celebrate and honor life by your commitment to healthy lifestyle and advanced pharmacology/technology when needed.

Associate Editor Mary Haynie, RN, MBA continues our features-Heart News, Corner Pharmacy, Heart Star and Living Healthy with tips, insights and inspiration from those of you who set an example for us all.

K. Lance Gould, M.D.

Martin Bucksbaum Distinguished University Chair
Professor and Director, Weatherhead P.E.T. Center for Preventing and Reversing Atherosclerosis

New Clinical Outpatient Office

The Outpatient office for the University of Texas Faculty Cardiologists is now located in the Hermann Professional Building (HPB) in Suite 600. This is where routine follow-up appointments with Dr. Gould will take place. The PET Imaging Center continues to be located on the first floor of the Jones Pavilion of Hermann Hospital.

For blood drawing prior to a clinical appointment, you may request a lab slip, and go to a lab near your home and have results sent to us. Or you may come in to Suite 600 (HPB) to pick up a slip and have blood drawn there or at the lab drawing station on the first floor in Suite 110.(HPB)

Heart News

Antioxidant Vitamins may Not Benefit Heart Disease

In the ongoing fight to prevent and treat heart disease effectively, the medical recommendations sometimes change due to the constant inflow of "new data" being discovered and published. Recently, numerous studies have indicated that high doses of antioxidant vitamins such as vitamin C and E and betacarotene do not add any benefit in the treatment of heart disease. This has led Dr. Gould to change his recommendation to all patients on vitamin intake.

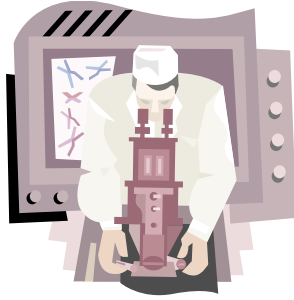
Prior to this new data, Dr. Gould had prescribed Vit E 400u and Vit C 500mg twice daily as well as a daily multivitamin. Now, he still recommends a daily multivitamin that contains folate and may contain modest amounts of vitamin C and E. However, additional Vitamin C, E, and betacarotene are considered unnecessary or optional. There is no sound evidence that the vitamins are harmful in any way and they may be helpful in other parts of the body besides the heart. One study suggested that excess vitamin C may prevent the rise in HDL cholesterol with "statin" drugs but this study failed to take into consideration the effect of triglyceride levels and excess weight on HDL levels.

Although it appears that extra antioxidant vitamins are not beneficial in treating heart disease, Dr. Gould is not adverse to patients who want to continue to take them for other reasons in a once daily dose of Vitamin E 400u and Vitamin C 500mg.



Explanation of the Cholesterol Sub-fraction Analysis

Although prevention and treatment of heart disease have greatly improved in the past two decades, there are still approximately 1.5 million people who have heart attacks each year. About half of these people have “normal” cholesterol levels. This fact convinced the medical community about the importance of measuring the LDL (bad cholesterol) and the HDL (good cholesterol) as well as total cholesterol. Recent studies have uncovered additional new information about the importance of still more detailed analysis of the cholesterol particles.



This new information has confirmed the importance of measuring not only the level of good and bad cholesterol but also the number and size of the good and bad particles. Patients who have small dense LDL particles (LDL Pattern B) are at higher risk of coronary events. The small dense LDL particles act like bullets and easily get into the wall of the arteries. The larger, fluffy (less dense) LDL particles (LDL Pattern A) tend to bounce off the walls of the arteries and are less likely to get into the walls of the arteries. Pattern B increases cardiovascular risk three fold.

The LDL subclass pattern is an inherited trait, determined by genes but interacting with body weight and diet. For genetically susceptible people, excessive dietary carbohydrates and weight cause the LDL type B pattern in association with elevated triglycerides. Reducing carbohydrates in food, weight loss, niacin and the fibrate class of medications lower triglycerides and convert the type B to the more favorable type A pattern.

The HDL cholesterol may also be present as a small dense particle that worsens atherosclerosis as compared to the larger less dense HDL particles that are protective. The HDL subtype is also determined by the interaction of genetic inheritance and lifestyle factors such as exercise and weight.

Finally, a particularly adverse form of abnormally structured cholesterol is called Lp(a) that is completely genetically determined and reduced only by niacin.

This special lipoprotein analysis has become available in only a few labs across the country, one is the Berkeley Heart Lab in California. The test is covered by Medicare and most insurance companies.

Corner Pharmacy

Why Am I taking All these Pills?

Do you sometimes find yourself asking this question? Many cardiac patients get frustrated with the number of pills required to keep them healthy, not to speak of the expense. Somehow, taking pills does not seem “natural”.

On the other hand, the natural course of diseases like high blood pressure, high cholesterol and coronary artery disease is progression to strokes, heart attacks, and death. The “natural” course of coronary heart disease makes it the number one killer in this country. Medications are one way of altering the adverse “natural” course of many diseases toward a more favorable outcome.



Natural ways to minimize the number and dosages of drugs that have to be taken is called LIFESTYLE management; losing weight, exercise, and proper diet usually reduces the medications needed to control blood pressure, blood sugar, and cholesterol levels. Sometimes, the problem of high cholesterol or blood pressure is an inherited trait and a perfect lifestyle is not enough for adequate control. In most cases, medications should be looked upon as helpers in blocking adverse genetic influences and enhancing lifestyle benefits in the fight against heart disease.

The Cardiovascular Protective Effects of ACE Inhibitors

The “ACE inhibitors” are a class of drugs mainly used to lower blood pressure and to protect against strokes and heart attacks in people with high blood pressure or heart failure. Examples of ACE Inhibitors are captopril, enalapril, quinapril (Accupril), fosinopril (Monopril), and lisinopril (Prinivil or Zestril).

The ACE stands for “angiotensin converting enzyme”. Angiotensin, a hormone whose name literally means “tense blood vessels”, is one of the most potent blood vessel constrictors humans produce. This hormone maintains appropriate blood pressure in healthy people, but it often works overtime in people with hypertension and heart failure causing the blood pressure to remain high. The ACE inhibitors block the pathway of angiotensin thus relaxing the blood vessels and lowering blood pressure.

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Heart Star

Judge Donald Jones had a personal introduction to heart disease at 2:30 in the morning when he was awakened by a feeling of indigestion. This uneasy discomfort quickly progressed to his chest and down both arms to his elbows. He became nauseated and began to sweat so he woke up his wife who drove him to the emergency room 2 miles away

Judge Jones is the State District Judge for the 266th District court in Stephenville, Texas and like most men who experience their first heart attack, he had no idea that he had a heart problem. The heart attack that night was the first sign of a problem. About 50% of people with a heart attack die before they reach the hospital.



This frightening statistic looms in his mind with a shiver as the Judge recalls the events of that March night in 1998. His quick actions saved his life since after arriving at the hospital, his heart stopped beating several times and started up only after he had electrical shocks with the defibrillator paddles. He received the clot-busting drug TPA within an hour and was flown to a larger hospital in Ft. Worth, where an angiogram was done. His narrowed right coronary artery that caused the heart attack was kept open with two stents. He recovered and was back at home in Stephenville in about a week.

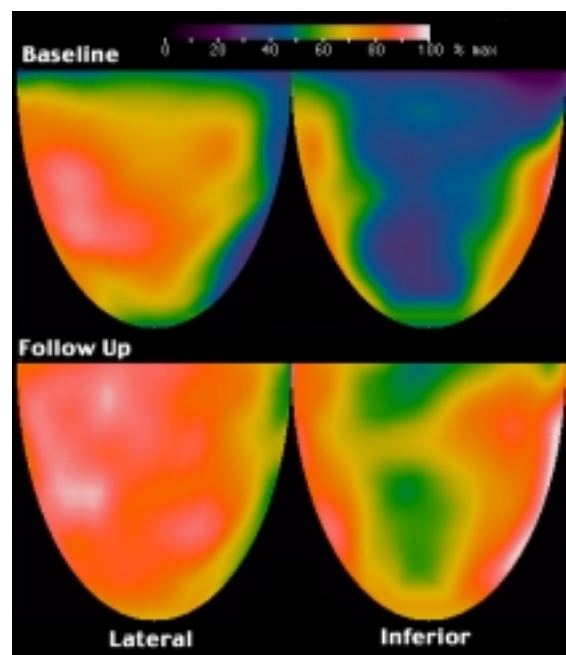
“But then the real fear set in” Jones explains “and fear is a great motivator.” As he tried to get back to a normal life after the heart attack, he began to reconsider his life. He needed some direction about how to prevent this from happening again. He turned to his long time friend, O. H. (Bud) Frazier M.D., a Houston cardiovascular surgeon, who directed him to K. Lance Gould, M.D.

After seeing Judge Jones baseline PET scan, Dr. Gould quickly laid out a lifestyle plan with specific goals for the judge to fit his busy schedule. At 5'10 1/2 inches tall and 244 lbs., he was almost 60 lbs. overweight and out of shape. His total cholesterol and his triglycerides were too high and his good cholesterol was too low. Dr. Gould prescribed the specific drugs needed to address these lipid abnormalities and taught him the basics of healthy eating and exercise to help him lose weight.

Within 6 months, Judge Jones lost 59 pounds and had met his target weight. As he lost weight, he was able to reduce the amount of medication he needed to control his high blood pressure. He continues to exercise 6 days a week by walking 2 miles and by light weightlifting and has maintained his weight now at about 180. “I feel better now than I have in years.” Jones says. He still works long stressful hours as district judge, but he always makes time for a work out and maintains a healthy diet.

After 18 months on the Reversal program, a second PET scan showed improvement in most areas of the heart with the scar of the heart attack remaining; another area with a mild blockage showed regression. “Being able to see visible improvement on the PET is important to me” says Jones. “It gave me great confidence, and the motivation to keep working on it.” Now after 3 years, his PET continues to improve.

This quiet, mild mannered, yet intense judge from a small town in Texas has become an avid proponent of the Reversal program. He has not only survived but sets an example in this commitment to life; reminding us of how fragile life can be but also how resilient and tough we are with proper care.





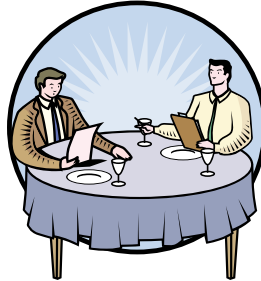
They promote “endothelial healing” or healing to the lining of the blood vessels which protects against heart attacks and strokes.

Several studies published in the last few years have shown that treatment with an ACE inhibitor improves symptoms and reduces deaths and re-hospitalizations in patients with heart failure. Also, when given soon after a heart attack, the ACE inhibitors improve survival and reduce the incidence of heart failure. A dry, hacking cough may be one side effect of ACE Inhibitors and should be reported.

Living Healthy

Restaurant Dining Tips

Sticking to a low-fat healthy diet seems easier at home, when you are choosing the food. However, it is important to stick with a healthy diet even when you eat out or in restaurants. Below are some tips for healthier restaurant dining or eating out.



Plan your Meals. Know the restaurants that are in your area and study the menus so that you know which items are low in fat and can be ordered. Don't wait until you are at the restaurant and hungry since your choice will then be made by your stomach, not your brain.

When you arrive at the restaurant, don't look at the menu. It's too tempting. Order one of the pre-selected items or just tell the waiter/waitress what you want without the menu, how you want it cooked, grilled or baked, with steamed vegetables, no starches, without any added oils. Let him know courteously that if it is greasy or loaded with oil, you will send it back to the kitchen but if right, he will earn a big tip. He will feel rewarded for serving what you want and will remember you.

Stick to one of the basic “Gould Diet” rules - don't let yourself get too hungry before eating. Before attending a banquet or social situation with lots of tempting food, snack on some protein food with fruit or vegetables with lowfat dip or drink a glass of water before going to the occasion so that you can more

K. LANCE GOULD, M.D.

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readily control your food choices and or volume. Request that no bread or chips be brought to the table since they are loaded with extra calories.

Don't be afraid to ask for a container to go. Just because you are served a huge helping of food does not mean you have to eat it all in one setting. Split it with your dining partner or take it home for a next day's meal. Stretching the food stretches (slims) your body.

**Ben Weiss'
Protein Popsicle**

2 scoops MetRx Whey Protein
8 Oz. Skim milk
3 frozen strawberries

Blend in blender and pour into plastic ice tray. Freeze and pop out for a quick snack. Makes 16 cubes. Approximately 12.5 calories and 2 gms protein each.

Website Reference

The United States Department of Agriculture has an easy to use nutrient database to help you determine the nutritional breakdown of virtually any kind of food. The website address is <http://www.nal.usda.gov/fnic/foodcomp/index.html>

Food Suggestions

Hillshire Farms Deli Select Honey Roasted Turkey Breast 99% fat free; 10 calories per slice; in the lunch meat section of most grocery stores

Soy Rocks- by Dixie Diner (www.dixiediner.com) 1-800-233-3668 ; A crunchy chocolate snack low in fat and high in protein-1/2 bag serving has about 100 calories and 10 grams protein (excellent replacement for chocolate candy)

Soy Nuts- by Genisoy (www.genisoy.com) 1-888-Genisoy; Lightly salted, crunchy, roasted soy beans in different flavors including BBQ. 120 calories in a serving with 12 grams protein (replacement for peanuts)

Splenda- (sucralose) a granular or liquid sweetener made from sugar, tastes like sugar, looks or bakes like sugar, has no calories and no side effects. Check it out at [http:// www.splenda.com](http://www.splenda.com)