

Heart Action



at The Cardiac Center of Creighton University

July, 1993

Join This Partnership!

by **Tom Anderson, EdD**

Coordinator of CVD Prevention Program

Partners In Cardiology (PIC) is a program for the reduction of risk of cardiovascular disease. It is a partnership in which an individual, his or her personal physician and The Cardiac Center staff determine the individual's level of involvement in the program.

The **PIC** program is appropriate for people with heart disease, and people who do not have a cardiac condition. It is based on the individual's decision to eat well, to put exercise into his or her daily routine, and to reduce daily stress. Many people have a need to change their lifestyle to avoid the onset or progression of cardiovascular disease. In order to accomplish that, we think having a partner is a good idea.

Many of us don't eat properly. We don't exercise regularly and we fail to take time for ourselves on a regular basis. These are common habits, and that's where the new **PIC** program comes into play. Participants and their partners can learn to eat healthy, learn how to exercise most effectively, and gain motivation and understanding for these changes.

A prerequisite for entering the program is a complete evaluation, including cardiovascular examination, physician consultation, laboratory blood work, chest x-ray, resting EKG, and an exercise stress test. This evaluation may be provided by the individual's personal physician or by us. The participants' records should be obtained from their personal physician to avoid duplication of tests. The Cardiac Center staff then reviews examination results with each participant and orients him or her to this year-long program.

A key part of **PIC** is our nutrition services, called "à la Heart." It entails dietary analysis, cooking schools, workshops and regular consultations with a Registered Dietitian. Exercise plays a key role, too. The **PIC** program includes aerobic workouts, flexibility classes and strength training.

Health Psychology is the third major component to this comprehensive approach to better health. Group sessions, relaxation technique training, and individual feedback sessions assist one in making adjustments to a new lifestyle. A smoking cessation program also supplements **PIC**.

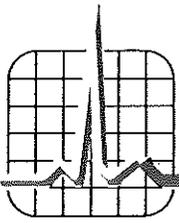
The **PIC** staff includes: **Dennis Esterbrooks, MD,**

Medical Director, **Mark Williams, PhD,** Director of CVD Prevention & Rehabilitation, **Tom Anderson, EdD,** **PIC** Coordinator, and **Mary Watson, MS, RD,** Nutritionist. For further information, please call (402) 280-4613.



The first participants in the **PIC** program are Omahans **Virginia Davis** and **Marge Bock**. Pictured with the **PIC** staff, from the left: **Mary Watson, MS, RD** (Nutritionist), **Lisa Thalken** (Exercise Leader), **Virginia Davis**, **Marge Bock**, and **Dr. Tom Anderson**.

Tom Anderson, EdD, recently joined The Cardiac Center as Coordinator of our new **Partners In Cardiology (PIC)** risk reduction program. Dr. Anderson comes to us after three years' at the Centinela Hospital Fitness Center in Culver City, Calif. as Director of Health Testing. Prior to that, he was the Director of the Medical and Exercise Departments at the Pritikin Longevity Center in Santa Monica, Calif. for four years. Dr. Anderson earned his EdD degree at the University of Arkansas in 1983. He has also earned an MBA at National University (Los Angeles) in 1991, a MS in Exercise Science at the University of Nebraska at Omaha in 1980, and a BA from Creighton in 1975. He is a native of Arlington, Neb.



Dr. Holmberg Joins Staff

The Cardiac Center is happy to welcome **M. Jeff Holmberg, MD, PhD**, to its medical staff. Dr. Holmberg has just completed three years of training in our Cardiology Fellows Training program. He served as Chief Fellow during his last year in the program.

Dr. Holmberg graduated from the Creighton University School of Medicine in 1987. He completed a residency in internal medicine at the Mayo Graduate School of Medicine in Rochester, Minn. in 1990. He earned a PhD in Physiology at the University of Nebraska Medical Center in 1983, studying cardiovascular reflexes.

Specializing in noninvasive cardiology, Dr. Holmberg will concentrate on echocardiography, in addition to seeing patients at outreach clinics and at The Cardiac Center. An Assistant Professor of Medicine at CU, he will also teach Cardiology Fellows, residents and medical students.

Three other Cardiology Fellows also completed their three-year training on June 30th. **Dr. David Brown** has accepted a position for an additional year of training in interventional cardiology at St. Vincent Hospital in Indianapolis, Ind. He will work with Drs. Nassir, Smith & Pinkerton, a private practice group.

Dr. Gregory Ross has accepted a position in a group practice with a former Creighton Cardiology



M. Jeff Holmberg, MD, PhD

Fellow, James Vincent, MD. Dr. Ross will be working with Billings Cardiology Associates in Billings, Mont. and at outreach clinics in Northern Wyoming.

Maj. Ken Tjeerdsma, MD, will be fulfilling his obligation to the United States Air Force. He is now stationed at Keesler Air Force Base in Biloxi, Mississippi.

Take a Bow

Three employees at The Cardiac Center have recently been recognized for their stellar performance.

Daniel Hilleman, PharmD, (Administrative Director of Clinical Research), received the Scholarly Achievement Award from Creighton's School of Pharmacy and Allied Health Professions. The award is presented to the faculty member who has exhibited the highest achievement in scholarly activity based on publications, grantsmanship and scholarly presentations.

Geri Moore, MA (CVD Prevention & Rehabilitation Exercise Specialist) has been named the American Heart Association Nebraska Affiliate's "Program Volunteer of the Year." She was honored for her work as the Program Chairperson of the Douglas County Division of the AHA. Under her leadership, several hundred educational kits were placed in Omaha area schools.

Mark Williams, PhD (Director of CVD Prevention & Rehabilitation) was recently cited by the AHA Nebraska Affiliate as "Research Volunteer of the Year." Dr. Williams is a past two-time chairman of

the research Committee and was instrumental in the development of a Research Program Standards Manual. Dr. Williams was also recently selected to serve on the State Rehabilitation Advisory Council for Vocational Rehabilitation, a Division of the Nebraska Department of Education.

The Cardiac Center + Walter Cronkite

The Cardiac Center recently sponsored a special television program, "How to Prevent a Heart Attack," which aired on Omaha's Channel 7 (KETV). The hour-long program, produced by Medstar, featured Walter Cronkite. It focused on the general public's perception of risk factors and what to do when warning signals are present. The Cardiac Center has received excellent response on this program.

Why Stress Echocardiography?

by James J. Nemecek, MD

Director of Stress Echocardiography

Stress echocardiography represents a new modality for the detection and evaluation of coronary artery disease in the hospital or clinic setting. Furthermore, results are immediately available to guide treatment. We have found exercise echocardiography extremely useful and hope to expand its application.

The rationale for the echocardiographic detection of coronary artery disease is based on the concept of the "ischemic cascade." Exercise-induced ischemia initially produces biochemical changes in the myocardium. Subsequently, wall motion deteriorates. It is after this that electrocardiographic changes develop. These are finally followed by actual angina. Echocardiographic visualization of wall motion is ideally suited for detection of the early changes of ischemia.

Stress echocardiographic evaluation involves obtaining resting echocardiographic images in multiple views using standard echocardiographic equipment. Following the stress test, these same images are immediately repeated. Computer acquisition allows for side-by-side analysis of resting and immediate post stress images. The images are obtained as single cardiac cycles and displayed in motion.

The normal response to exercise is augmentation of myocardial wall motion. Thus, ischemia is identified by deterioration in wall motion with stress. Because myocardial wall motion can be directly visualized, abnormalities that make electrocardiographic interpretation difficult (e.g., LVH, left bundle branch block, digitalis therapy, etc.) do not interfere with this test.

Stress echocardiography can be performed using a traditional treadmill stress form of exercise or with pharmacologic stress, using a graded infusion of Dobutamine, which increases heart rate and myocardial contractility and simulates exercise. Dobutamine stress testing is particularly well-suited for patients unable to perform treadmill exercise or for patients not able to attain an adequate level of exercise on the treadmill.

Published studies to date report results of exercise echocardiography to be comparable to those of

Thallium scintigraphy in the identification of coronary artery disease. In our own experience, we have found this to be true. We are currently using exercise echocardiography routinely in the evaluation of patients with suspected coronary artery disease. Furthermore, exercise echocardiography is useful in following patients with known coronary artery disease and in deciding when invasive evaluation is required again. Dobutamine stress echocardiography has also been reported recently to be highly accurate for assessment of perioperative cardiac risk in patients undergoing non-cardiac surgery.

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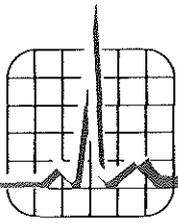
Our Patients

Our patients are the most important visitors to these premises. They are not dependent on us - we are dependent on them. They are not outsiders to our practice - they are part of it. They are doing us a favor by giving us the opportunity to care for them.

M.B.S.

THE CARDIAC CENTER
of CREIGHTON UNIVERSITY
Quality Patient Care Through Education and Research

We're here for you—NOW!



Pulling the Plug

This year marked the end of an era when the main-frame computer was unplugged and the dismantling of equipment began. For nearly 20 years the "dinosaur" filled the information needs of The Cardiac Center. The big computer served us well, but its time had come to make way for the micro-computers.

Driven by the challenge to find better methods of delivering information services and seeking effective ways to lower costs were the main reasons for the shift. Information Systems's strategy was to provide more flexibility, and a computer environment that puts powerful information tools into the hands of professionals.

Gone are the bulky terminals and their monochrome-colored monitors. They have been replaced with streamlined, compact, desktop computers with brightly colored displays. Behind the scenes, personal-sized computers do much more work than was done by their predecessor, the IBM 4381 mainframe, with just a fraction of the floor space and electrical power required. We believe the new environment will provide these advantages: greater capability in sharing data and resources e.g., printers; ease in connecting users to remote communication networks; and immediate access to information for clinical, research and administrative use.

Our personal computers first appeared in September, 1984. The Cardiac Center entered the world of networking personal computers with our **HeartLan** computer network in July, 1990. Since then patient billing, electronic claims processing, medical records imaging and productivity tools have all been added to the network, to free up administrative time. Nearly complete is the automated appointment scheduling system, which will also improve the overall efficiency of The Cardiac Center.

George Casper (Director of Information Systems) recalls, "Initial reaction to the change to **HeartLan** has been very favorable. Once the staff saw the capabilities and potential of the network, interest spread quickly. People keep coming up with great ideas for new uses of the computer to make them more efficient. We have found that computer systems can be developed much quicker with a great deal more user friendliness."

Casper added, "the Information Systems staff has

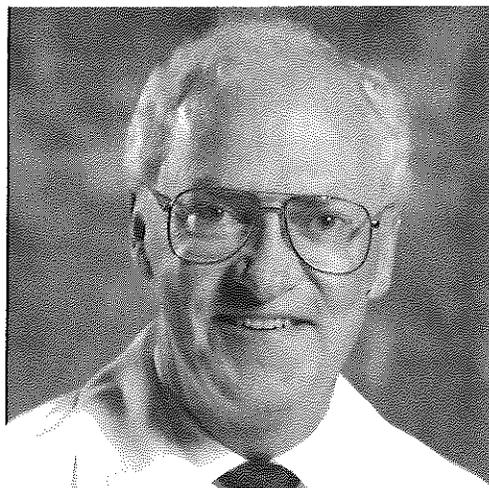
made a smooth transition to the network environment. I have been pleased with their speed and efficiency in developing new systems. Getting poised and positioned for the next wave of technology is the challenge we now face."



Standing from left: **Terry Azeltine** (Computer Programmer), **Cathy Harrahill** (Systems Analyst), **George Casper** (Director of Information Systems); kneeling, **Al Vander Schaaf** (Computer Operations Supervisor)

Dr. Lynch Governs ACC-Nebraska

The Board of Trustees of the American College of Cardiology has recently elected Dr. Joseph Lynch Governor of the American College of Cardiology for Nebraska. During his three-year term, Dr. Lynch will be responsible for the evaluation of all candidates for membership in the College from Nebraska and making recommendations to the ACC Credentials Committee. He will also advise the College of the opinions of the Nebraska membership, and inform the members of the policies and significant actions of the College. Dr. Lynch is also responsible for the growth of the College, the promotion of its goals and objectives, and the sustained interest and active participation in the affairs of the College by the Nebraska membership.



Joseph Lynch, MD

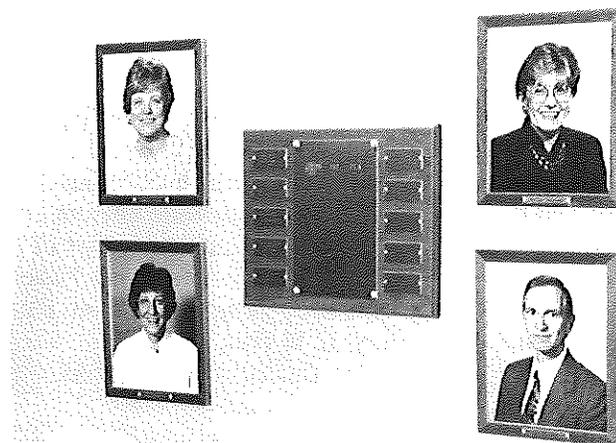
Outstanding Staff

These four employees are the first year's recipients of The Cardiac Center's "Employee of the Quarter" award, in recognition of their sustained outstanding performance. The purpose of this award is to recognize people who are professional, concerned for patients and co-workers, and willing to do that little extra, when necessary.

The April-June, 1992 awardee was **Mary Conley**, Outreach Services Supervisor. Everyone who works with Mary (pictured at right), both here at The Cardiac Center and throughout our Outreach Clinic network have experienced her positive attitude, vast expertise and genuine readiness to help.

The July-September, 1992 awardee was **Steve Meldrum**, Associate Administrator in charge of Facility Operations. Steve worked for many months coordinating our move from Saint Joseph Hospital into The Cardiac Center's new building last September. He was also recognized for his contributions to many committee projects that enhance employees' working conditions.

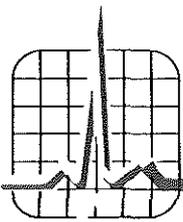
The October-December, 1992 recipient was **Lois Stengel, RN, BSN**, Nurse Coordinator of Cardiac Drug Evaluation Clinic. Nominators pointed to her relaxed style of leadership that combines confidence in her co-workers, fairness...she never expects anyone to



Upper left, Ann Clark; upper right, Lois Stengel, RN, BSN; lower left, Mary Conley; lower right, Steve Meldrum.

do something she wouldn't do herself and she pitches in to help.

The January-March, 1993 awardee was **Ann Clark**, Secretary for Drs. Esterbrooks, Hee, Mooss, and Pagano. Ann's attitude toward her work is remarkable. Her workload is indicative of her skills, innovativeness, and a "willingness to help when needed." She takes pride in the quality of her work, and the quality of care provided to our patients. And it shows!



À la Heart Nutrition Services at The Cardiac Center

by Mary Watson, MS, RD
Nutrition Coordinator

Are you tired of hearing excuses from patients about their non-compliance to diet and weight loss programs?

Our nutrition services program offers the only comprehensive approach to nutrition education and dietary behavior change in the Omaha area. It provides a variety of opportunities including individual nutrition counselling, cooking schools, group classes and workshops which highlight current food and nutrition issues.

This program is designed to provide usable and accurate nutrition information, as well as a mechanism for practicing and reinforcing heart healthy eating behaviors. All of our activities are taught or approved by a registered dietitian/certified nutritionist.

Most unique to our program is the "à la Heart Cooking School," which features guest chefs including Cardiac Center staff and program participants, and area restaurant chefs. Food and nutrition experts will demonstrate and share low fat cooking techniques, recipes, and tips on planning, preparing and serving a heart-healthy diet.

Our program also features a wide variety of hour-long workshops on various topics to provide current information on nutrition and how to make it a part of daily living. We have already held workshops on "The New Food Label" July 8th, plus "The Art of Low Fat Restaurant Dining" on July 12-14-17th, and "Fat Budgeting Ice Cream Sundae Buffet" on July 22nd.

Upcoming Calendar of Events

Dining on the Deck Cooking School

August 6, Friday, 11:00-12:30 pm
August 10, Tuesday 6:00-7:30 pm

Diet and Heart Disease Are You Making the Changes You Need To?

August 17, Tuesday 7:00-8:00 pm
August 20, Friday 10:00-11:00 am

Our nutrition program staff will be happy to assist you, your office staff and your patients in providing and achieving appropriate nutrition care. For more details, please call (402) 280-4613.

DIJON PORK TENDERLOIN

4- 4 oz pork tenderloin cuts
1/2 cup dry bread crumbs
3 tablespoons dijon mustard
3 tablespoons lemon juice
vegetable oil cooking spray

1. Heat over to 375 degrees.
2. Spray 13"x9" pan with cooking spray.
3. Combine dijon mustard and lemon juice. Dip both sides of pork tenderloin into mixture.
4. Coat with bread crumbs.
5. Bake for 30-40 minutes until pork is no longer pink. Turn after 15-20 minutes.

Yield: 4 servings

Nutrition Information Per Serving:

Calories: 200
Fat: 5 grams
Saturated Fat: 1.8 grams
Cholesterol: 56 mg
Sodium: 470 mg

LEMONADE COOLER PIE

1/2- 1 cup graham cracker crumbs, "Nilla Wafer" crumb pie crust
2 tablespoons reduced calorie margarine, melted
4 cups frozen non-fat vanilla yogurt, softened
1 12-ounce can frozen lemonade concentrate, thawed

1. Combine crumbs and melted margarine. Pat into 8 or 9" pie plate. Place in freezer for 5 minutes.
2. Combine slightly softened frozen yogurt and lemonade. Mix well.
3. Place yogurt and lemonade mixture into pie crust.
4. Re-freeze until served.

Yield: 10 servings

Nutrition Information Per Serving:

Calories: 132
Fat: 1.5 grams
Saturated Fat: trace
Monounsaturated Fat: .5 grams
Polyunsaturated Fat: .5 grams
Cholesterol: 0 milligrams
Fiber: 0 milligrams
Sodium: 40 grams

SALMON RICE SALAD

2 cups cooked white rice
1 (7 1/2 ounce) can salmon, water-packed, drained and flaked
1/2 cup chopped celery
1/2 cup chopped, unpeeled cucumber
2 tablespoons finely chopped onion
1/2 cup non-fat ranch salad dressing
vegetable oil spray

1. Light spray 4 cup salad mold or bowl with vegetable oil spray.
2. Combine all ingredients, mix lightly.
3. Lightly press rice mixture into mold or bowl.
4. Refrigerate overnight.
5. Place serving plate over mold, invert to unmold salad.

Yield: 4- 1 cup servings

Nutrition Information Per Serving
Calories: 191
Fat: 2.7 grams
Saturated Fat: .3 grams
Cholesterol: 29 mg
Sodium: 369 mg

SKEWERED GRILLED POTATOES

2 pounds red potatoes, quartered (about 6 potatoes)
1/2 cup water
1/2 cup non-fat mayonnaise-type salad dressing
1/4 cup chicken broth
2 tsp dried oregano leaves
1 tsp garlic powder
1/2 tsp onion powder

1. Place potatoes and water in 2 quart casserole; cover. Microwave on high 12-15 minutes, stirring after 8 minutes. Drain.
2. Mix remaining ingredients.
3. Combine mayonnaise mix and potatoes, cover. Refrigerate 1 hour.
4. Drain, reserving salad dressing mixture. Arrange potatoes on skewers.
5. Place on grill over hot coals. Grill for 10 minutes.
6. Rotate skewers, brush with reserved salad dressing mixture. Continue grilling for 4 more minutes.

Yield: 6 skewers or servings

Nutrition Information Per Serving:
Calories: 248
Fat: 0 grams
Saturated Fat: 0 grams
Cholesterol: 0 grams
Sodium: 300 mg

STRAWBERRY RHUBARB ICE MILK

1 1/4 cups sugar, divided
1 cup sliced fresh rhubarb
1/4 cup water
3 1/2 cup fresh strawberries
2 tablespoons lemon juice
1 1/2 cups 1% low fat milk
1- 12 ounce can evaporated skim milk
1/2 cup frozen egg substitute, thawed
1 teaspoon vanilla extract

1. Combine 1/4 cup sugar, rhubarb and water in a saucepan. Bring to a boil. Reduce heat and simmer, uncovered, 15 minutes.
2. Blend rhubarb mixture and 1 1/2 cup strawberries until smooth. Set aside.
3. Chop remaining 2 cups of strawberries.
4. Combine chopped strawberries with 1/4 cup sugar and lemon juice. Stir gently. Set aside.
5. Combine remaining 3/4 cup sugar, rhubarb mixture, low-fat milk, evaporated milk, egg substitute and vanilla in a large bowl. Beat at high speed until blended.
6. Add strawberry mixtures.
7. Pour into a freezer can of a 1 gallon hand-turned or electric freezer. Freeze according to manufacturer's instructions.

Yield: 10 cups

Serving Size- 1/2 cup

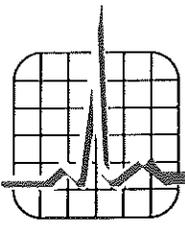
Nutrition Information Per Serving:
Calories: 132
fat: 3 grams
Saturated Fat: .4 grams
Cholesterol: 2 mg
Sodium: 57 mg

YOGURT "JIFFY BRAND" MUFFINS

1 packet Jiffy Muffin Mix (corn, bran, oatmeal, banana nut, apple cinnamon)
1/2 cup plain non-fat yogurt (replaces 1 egg and 1/3- 1/2 cup milk)

1. Combine ingredients.
2. Gently mix.
3. Bake as directed on package.

Nutrition Information:
Calories: 100
Fat: 3 grams
Saturated Fat: 0 grams
Polyunsaturated Fat: 2 grams
Cholesterol: 0 milligrams
Sodium: 150 milligrams



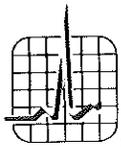
Why Stress Echocardiography?

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Research is currently ongoing at our institution to find further applications for stress echocardiography. **Dr. Lacyone Morales-Finglass**, a Fellow in the Creighton Cardiology Program, is evaluating the use of Dobutamine stress echocardiography in patients after PTCA. Stress echocardiography holds promise for being able to detect restenosis more accurately than conventional techniques, such as exercise electrocardiography and Thallium scintigraphy. **Dr. Jeff Van Gundy**, Chief of Pediatric Cardiology, is investigating

the use of exercise echocardiography in the pediatric population and in children with congenital heart disease.

We plan to implement exercise echocardiography at our Outreach Clinic Hospitals in the near future, so as to further improve the evaluation and care of our patients. The availability of this test will eliminate the need for some patients to travel to Omaha for further testing.



THE CARDIAC CENTER
of CREIGHTON UNIVERSITY



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