Cardiac Rehab: What Can It Do For Me?
Jon Sides, MS, ACSM-RCEP

According to the American Heart Association, 935,000 people in the United States will suffer a coronary event or heart attack this year, and 30% of these will have a second and possibly fatal event. Yet, fewer than 20% of these survivors will attend cardiac rehabilitation to help them recover and prevent future coronary events. Many experts believe that cardiac rehabilitation is one of the most underutilized therapies, despite how effective it has been proven to be in the prevention of future events.

Perhaps one of the reasons that cardiac rehabilitation is so underutilized is the awareness of what it entails. Cardiac rehabilitation is exercise therapy, coupled with education, for those recovering from a cardiac event. By learning how to adjust diet, stress, and living a healthier lifestyle, the risk of another complication is dramatically reduced. Some of the lifestyle modifications addressed in cardiac rehabilitation are tobacco use, high blood pressure or cholesterol, obesity, diabetes, as well as a sedentary lifestyle. A positive change in these risk factors will ultimately lead to a healthier life.

In addition to lifestyle changes, regular rehabilitative exercise is performed under the supervision of skilled professionals, and is custom-tailored to participating individuals. Blood pressure checks and heart monitoring ensure that each person is safe while participating in the program. By strengthening the body and heart in a safe environment, survivors can achieve many physical and psychological benefits.

“There are a lot of patients that start the program with anxiety over their heart, but throughout our program you can see a change. They begin to gain confidence in themselves when they get stronger. Some people even graduate from cardiac rehab healthier than they were before their heart event,” says Jay Carrasco, an Exercise Specialist at University Medical Center’s Cardiac Rehabilitation.

Benefits of exercise include improved physical functioning, improved self-esteem, better blood pressure control, lower cholesterol, increased strength, lower levels of stress and anxiety, and improved quality of life. These benefits are not limited to individuals with heart disease, however. Even if you have no health problems, current CDC guidelines recommend 150 minutes a week of low to moderate activity. In fact, walking as little as 30 minutes a day has shown tremendous health and heart benefits in people of all ages, and may help in the prevention of many diseases like cardiac disease and cancer.

Although anyone can benefit from exercise, those who would likely most benefit from cardiac rehabilitation include those who have recently had a heart attack, stent or angioplasty, open heart surgery or transplant, as well as those with stable angina, congestive heart failure, or peripheral vascular disease. Talk to your doctor about the availability of cardiac rehabilitation in your area, and whether it is right for you. But in the meantime, stay active!
GET Fit 2015

GET Fit Lubbock is an exciting competition where teams compete to reach their fitness and weight loss goals. The competition includes exercise, weight loss activities, and educational sessions about various topics from nutrition to yoga. This year we had 52 participants and included educational classes along with a 8-week walking program. Participants had the opportunity to attend these classes on different topics such as nutrition, healthy aging, and many other interesting topics. Participants who chose to participate in the research portion of GET Fit completed a pre- and post-test where their blood pressure, cholesterol, glucose, weight, BMI and body fat percentages were measured. Overall the results of the study were positive and many participants saw decreases in their weight, cholesterol and BMI. We are looking forward to continuing the GET Fit program in the future and hope to see you all at future GET Fit events!

Fixit Stations on TTU Campus

The Fixit Stations have been placed in several different locations throughout the Texas Tech campus. They are located outside seven residence halls, the Recreation Center, Student Union Building/University Library and the Electrical Engineering building. These stations have air pumps and various tools to help bicyclists fix minor mechanical issues that may arise while riding around campus. The Garrison Institute on Aging (GIA) hopes to install more Fixit Stations in the areas surrounding the Texas Tech campus in order to meet the needs of other riders in the area.

Compass for Questions and Answers for Wellness

Lubbock RSVP, along with the GIA, is hosting a free seminar on April 1st, for anyone age 55 and older. This seminar will feature speakers from a variety of different backgrounds to assist with any questions or concerns participants may have regarding: Home Health and Personal Care, Nutrition and Exercise, Money and Legal Matters, Hospice and Palliative Care, Social Networking, and Dollars and Sense.

The Compass for Questions and Answers for Wellness event is free and open to the public. Reservations are required, and the deadline is March 29th. The event will be held at the Broadway Church of Christ (1924 Broadway), east entrance lower level. Registration will begin at 8:45 a.m., and the seminar will run from 9:00 a.m. – 2:00 p.m., lunch is included with each reservation. If you would like to make a reservation or need more information, contact the Lubbock RSVP office at (806)743-7787 by 5 p.m. Tuesday, March 19th.
One of this issue’s highlighted staff members is Senior Research Associate Dr. Maria Manczak. Dr. Manczak obtained her Ph.D. in Immunology and Experimental Therapy at the Polish Academy of Sciences. She has experience in genetics, molecular biology, protein chemistry, immunology and cell biology. She has been working at the GIA for 2 years after moving from Oregon with Dr. Reddy to continue their research. Currently, Maria is working on learning more about the protective effect of mitochondrial division inhibitor 1 and two mitochondria-targeted antioxidants: MitoQ and SS31 on striatal neuron express Htt mutation. She has contributed to two published research papers on this subject. Her favorite part about working at the GIA has been the brain bank, which has been very useful for research of neurodegenerative diseases. In her free time Dr. Manczak enjoys reading psychological books, going to the movies, going hiking and enjoying the Texas Tech swimming pool. As a new Texan she also enjoys taking advantage of every opportunity to explore Texas with her husband. Dr. Manczak looks forward to continuing her research at the GIA and making further advancements in the research of Huntington’s disease.


The next featured staff member is Linda Yin. Linda has been at the TTUHSC since 1997 and has been with the GIA since 2005. She received a Masters of Science degree in Electrical Engineering from Xi’an Jiaotong University in Xi’an, China. Linda gained her research experience in the genetic research lab and extended her research into inflammation, oxidative stress and mitochondria function related to neurodegenerative diseases such as Alzheimer's disease and Huntington's disease. Currently, Linda is working on a project related to Huntington's disease. In the lab she is testing mitochondrial division inhibitor 1 (Mdivil) and mitochondrial – targeted molecules MitoQ and SS31 using mutant Huntington’s cell model, and observing mitochondrial function in “real time”. By observing this reaction they can determine cell oxygen consumption rates and extracellular acidification rate (ECAR) and the laboratory staff have made many interesting findings. In her free time Linda enjoys traveling, reading, watching sports and spending time with her family and friends. Linda is excited about continuing her research on various topics at the GIA.


New GIA Academic Research Seminars

March 29
Dr. Rajinder Koul
Professor and Chair, Department of Speech, Language and Hearing Sciences
TTUHSC

April 5
Dr. Kumada Das
Professor and Director, Anesthesiology Research
Department of Anesthesiology
TTUHSC

May 3
Dr. Gemma Casadesus-Smith
Associate Professor, Department of Biological Sciences
Kent State University

Lectures are from 12 p.m. to 1 p.m. at the Texas Tech University Health Sciences Center
Academic Classroom Building Room 120 (3601 4th Street).
*Room number subject to change*
March 30
“Colorectal Cancer Prevention”
Liesl Wyett, MPA
Department of Public Health TTUHSC

April 27
“How Muscles Might Help Your Brain”
John W. Culberson, MD
Associate Professor, Family and Community Medicine Director, Geriatric Medicine Programs.
TTUHSC

May 25
“Nutrition”
Allison Kerin, MS, RS, LD
Director of Employee Wellness and Recognition
Office of Human Resources TTUHSC

Lectures are from 4 p.m. to 5 p.m. at the Texas Tech University Health Sciences Center Academic Classroom Building Room 150 (3601 4th Street).
*Room number subject to change*


