

March 2020

Cardiac Athletic Society Edmonton - Contacts

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Heart Murmurs is the newsletter of CASE published in February, March, April, May, September, October, November and December each year. Suggested articles can be submitted to Barry Clark at kbclark1@telus.net Back issues of the newsletter are posted on the CASE website at: http://www.edmontoncase.ca

If you wish to unsubscribe from this newsletter, please e-mail stuart_e@telus.net with a subject line 'unsubscribe".

Support for CASE

As a recognized charitable institution. CASE makes a significant difference to people interested in maintaining their heart health. If you make a financial gift, either as a direct contribution, or in the memory of a member who has passed, we will issue a tax receipt.

THE CASE ANNUAL GENERAL MEETING

The 2020 AGM is scheduled for Monday March 9 at 7:00 PM at SEESA (South East Edmonton Seniors Association) 9350 82 Street NW, Edmonton. Please come out and participate in the development and management of your association! Note that the AGM occurs on the date the educational lecture would normally be scheduled.

SEARCH FOR DIRECTORS

The Board of Directors for CASE undertakes a valuable function, ensuring that the day to day operations of CASE are performed smoothly to the benefit of all our members. We could not operate CASE without Directors who are committed to serving the members. We are currently looking for a couple of Directors-at-Large. This is an excellent opportunity for you to become acquainted with the work of the Board. If you would like to become involved with the Board and are not sure how you can help, please contact Wayne Jackson780-432-7203 or myself to get more information.

Gary Duguay President 780-993-0281

HUMAN HEARTS EVOLVED TO NEED EXERCISE

A unique study that compared the hearts of African great apes, native Central Americans, and American athletes sheds new light on the evolution and adaptability of the human heart. But the findings also have a practical message. "They reinforce the importance of regular brisk walking or jogging throughout life to stay healthy as you age," says the study's senior author Dr. Aaron L. Baggish, director of the cardiac performance lab at Harvard-affiliated Massachusetts General Hospital.

The study included great apes (gorillas and chimpanzees) and four different groups of men: inactive men, endurance runners, football linemen, and Tarahumara Indians. All underwent heart function studies using ultrasounds done during various activities. The groups were specifically chosen to offer clues to heart function from an evolutionary perspective, says Dr. Baggish, whose collaborators include his friend and running partner Daniel Lieberman, professor of human evolutionary biology at Harvard, and Dr. Robert Shave, an exercise physiologist from the University of British Columbia.

Chimps vs. early humans: Chimpanzees, our closest evolutionary relatives, spend most of the day feeding and resting, interspersed with short bouts of climbing and fighting. This brief but intense exertion creates pressure in the heart's chambers, resulting in thicker, stiffer walls. In contrast, our ancient ancestors had to hunt and gather food to survive, requiring them to walk and run long distances. As evolution progressed, early farmers relied on that same physical endurance to plow, plant, and harvest their food. As a result, human hearts evolved to have thinner walls and be more flexible. The heart's chambers became slightly larger, and they also were able to twist slightly (like wringing out a towel), which helps get more blood out and back into the heart as it relaxes.

The Tarahumara Indians, who live in Copper Canyon, Mexico, are one of the few civilizations that remain largely untouched by Westernization. "They lead what anthropologists refer to as a subsistence farming lifestyle that demands lots of walking, jogging, and other movement all day long," says Dr. Baggish.

"Their hearts represent how the heart has naturally evolved to function — the pure form of a human heart, if you will," he says. But your heart also adapts over your lifetime depending on what type of exercise you do, or don't do.

The heart's main pumping chamber, the left ventricle, reflects the type of activity a person typically does. The left ventricles of the endurance runners were longer, larger, and more elastic than average (and therefore able to cope with large volumes of blood). The hearts of the football linemen, on the other hand, were more adapted to short, intense bouts of exercise that reflects their strength training. The walls of their left ventricles were thicker and less flexible, allowing them to cope better with pressure rather than volume.

However, the group of men who didn't exercise ended up being the most important part of the story with respect to health lessons. These men, all in their 20s and 30s, didn't have any traditional heart disease risk factors, such as high blood pressure. But their untrained hearts appeared more ape-like, with thicker and less flexible walls.

If you don't do any physical activity, you don't push large amounts of blood through your heart and blood vessels on a daily basis. Both the heart and blood vessels start to stiffen. It creates a vicious circle: the less you move, the less you'll be able to do the type of exercise that keeps you healthy.

Exercise to prevent high blood pressure

The new findings suggest that the process of developing high blood pressure is set in motion years before it is first detected in a doctor's office, he says. Unfortunately, only about 20% of American adults get the recommended 150 minutes per week of moderate-intensity physical activity. And about a third of adults have high blood pressure.

Even though it's better to exercise throughout life, it's never too late to start. For many people, changing from being sedentary to being active is hard and requires a real behavioral shift. "But the more we can help people understand the underlying causes and implications of their choices, the better off we are," says Dr. Baggish.

Source: Harvard Heart Letter Published: January, 2020

WALK YOUR WAY TO MORE FLEXIBLE ARTERIES

The more steps you take per day, the more flexible your arteries may be, a new study suggests. Elastic, flexible arteries are a sign of a healthy cardiovascular system, while stiff, inflexible arteries are a harbinger of heart disease.

Researchers pooled findings from 10 studies that measured people's daily step counts and their arterial stiffness, using a technique called pulse wave velocity. With every heartbeat, a wave of blood travels through the body's network of arteries. Measuring the speed of the pulse wave provides information about how stiff or how flexible the arteries are. The stiffer the arteries, the faster this wave travels.

People who were highly active (those who took more than 10,000 steps per day) had the lowest pulse wave velocity measurements, suggesting their arteries were more elastic than those of less active people. In general, the fewer steps people took per day, the stiffer their arteries. Adding just 1,000 steps daily may lead to measurable improvements in pulse wave velocity, say the authors, whose study appeared in the February issue of Hypertension.

Source: Harvard Heart Letter Published: April, 2019

IMPROVE YOUR HEART HEALTH WITH RUNNING A MARATHON

If even the thought of stepping on a treadmill makes you cringe, get excited: Researchers say you can count any kind of physical activity toward your daily exercise goal, meaning cardio machines and pricey gym memberships are totally optional.

According to a large international study published last year, logging 150 minutes a week of moderate-intensity physical activity (the World Health Organization's current recommendation) could prevent 1 in 12 deaths and 1 in 20 cases of cardiovascular disease worldwide. But that activity doesn't have to happen in the context of a workout class or a long-distance run. Researchers considered everything from walking to work to cleaning the house as exercise.

The study looked at the food and fitness habits of more than 130,000 people from 17 countries. Among other results, the researchers found that meeting the 150-minute moderate-intensity weekly activity goal reduced the risk for death from any cause by 28 percent and reduced the risk of heart disease by 20 percent, regardless of what kind of activity the person did.

Setting realistic goals is one way to set yourself up for success and finding more active ways to accomplish everyday errands may make tackling those goals a whole lot easier. The most beneficial activity is the one that a person enjoys and will do regularly. Activities that we might not think of as exercise, such as cutting the grass, washing the windows, raking leaves, etc., are great and can be just as intense as a brisk walk or light jog. More physical forms of household chores like mopping the floors or vacuuming the carpets can count.

The key to increasing activity is to incorporate it into everyday tasks such as getting off at an earlier bus stop, parking farther away, or opting for the stairs over the escalator. Sprinkling these seemingly small activities into your lifestyle on a regular basis add up and can help prevent obesity, diabetes, heart disease, and some cancers.

The current guidelines of 150 minutes of weekly moderate-intensity activity translates to about 20-30 minutes most days of the week. People can accumulate their 20-30 minutes over the day, but we recommend that people work towards doing 20- to 30-minute stretches once their fitness allows. People who did more continued to see reductions in risk.

Source: extracted from Michelle Konstantinovsky Jan 23, 2019 Fitbit Magazine.

	CASE I	Events C	alendar	· - Mar	ch 2020	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 Exercise Program Terwillegar Rec. Ctre Volleyball 3:45 Aerobic/Stretch 4:45	4	5 Exercise Program Terwillegar Rec. Ctre Volleyball 3:45 Aerobic/Stretch 4:45	6	7
8	9 CASEAGM 7:00 PM SEESA	10 Exercise Program Terwillegar Rec. Ctre Volleyball 3:45 Aerobic/Stretch 4:45	11	12 Exercise Program Terwillegar Rec. Ctre Volleyball 3:45 Aerobic/Stretch 4:45	13	14
15	16	17 Exercise Program Terwillegar Rec. Ctre Volleyball 3:45 Aerobic/Stretch 4:45	18	19 Exercise Program Terwillegar Rec. Ctre Volleyball 3:45 Aerobic/Stretch 4:45	20	21
22	23 Board Meeting Bonny Doone 9 a.m.	24 Exercise Program Terwillegar Rec. Ctre Volleyball 3:45 Aerobic/Stretch 4:45	25 Social Breakfast SEESA 9 am	26 Exercise Program Terwillegar Rec. Ctre Volleyball 3:45 Aerobic/Stretch 4:45	27	28
29	30	31 Exercise Program Terwillegar Rec. Ctre Volleyball 3:45 Aerobic/Stretch 4:46				