

Heart Murmurs

May 2019

## Cardiac Athletic Society Edmonton - Contacts

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Gary Duguay Ron Kirschner Gary Duguay Ron Kirschner Burn Evans Stuart Embleton Wayne Jackson Barry Clark with Stuart Embleton Mae Hadley To Be Announced Tessie Cruz Wayne Saunders Roberto Cruz Cliff Werner Coleen Foster 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 <u>kbclark1@telus.net</u> 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 <u>stuart e@telus.net</u> 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.

#### GET YOUR TICKETS TO THE CASE ANNUAL BBQ

The CASE BBQ is being held Friday, June 7th at SEESA with cocktails at 5:00 PM and dinner at 6:00 PM. BBQ tickets are available from Roberto Cruz (587-759-8861 or e-mail at cruzrm@telus.net) and Stuart Embleton (780-435-2602 or e-mail at stuart\_e@telus.net). Tickets are \$30.00 each. The deadline for ticket sales will be May 31.

The menu includes steak, chicken, baked potatoes, baked beans, salads, with strawberries, ice cream and homemade cookies for dessert. Beverages are included.

We are asking for ten members to provide salads and two or three volunteers to bake the potatoes. The salad providers will be reimbursed \$ 10.00. If you can make a salad, please contact Marilyn Prusko at 780 436 1390. We look forward to seeing you there.

# NEXT EDUCATIONAL EVENING

On 7:00 PM, Monday, May 13, 2019, at the TFRC, we will have a speaker discussing how to: *"Live Safely and Longer in your Home."* The use of new technology to improve your safety at home will cover home monitoring, support and response services, GPS monitoring information.

### Please MARK THE DATES for Future Educational Evenings!

• Mon. Sept. 9, 2019 – All About Cannabis

## FORE!

Attention All Golfers! Whether your a seasoned golfer or a beginner, The CASE golf program welcomes you to join us each Wednesday afternoon for an enjoyable round of golf. (Nine holes)

CASE has a weekly Tee time of 12 pm, Wednesdays, at Twin Willows Golf Course, (156 Street just north of 137 Ave). For further information on the program, please contact Wayne Saunders (email: sharway@telusplanet.net. or phone 780-886-1802).

In addition, there is an Annual CASE Golf Tourney as well as the highly popular Ed Abel Memorial Tourney on Wednesday July 10. More information will be coming on this in the summer.

Wayne Jackson leads group walks every 3 or 4 weeks through the summer. It is a great way to get out and enjoy the river valley with friends from CASE. Getting together for snacks or lunch is not unheard of...

# POWERED BY THE HEART

For those whose hearts occasionally go off rhythm, pacemakers are, quite literally, life savers. By providing a small electrical jolt at the right moment, they can keep a heart working at the appropriate pace. Their main drawback is that they use batteries. Even the best of them eventually run out of energy, and replacing the batteries requires surgery. Since surgery is generally best avoided, the search has been on for long-lasting power sources. Various options have been explored, including, in the 1970s, plutonium. nuclear-powered pacemakers. These, thankfully, have fallen out of fashion. Today, devices with lithium batteries last between 5 and 15 years. Researchers Zhang Hao and

Yang Bin of Shanghai sought a way of recharging a pacemaker's battery by scavenging energy from inside the body. They have used the heart muscle itself to power a tiny generator. Previous attempts to use cardiac muscle power to run pacemakers relied on piezo-electric materials. These release electrons when deformed and can be attached to beating hearts so that they are slightly bent with each heartbeat thereby generating electricity. This has worked, but not well enough: the output has rarely exceeded five micro- watts, while most pacemakers require at least ten.

They speculated that they could improve matters by arranging for their piezoelectric composites to be more dramatically deformed. First, they created a small capsule from a sheet of flexible polymer a tenth of a millimeter thick. After compression, this capsule would return to its original shape. They then attached strips of piezoelectric composite to either side of the capsule, attached electrodes to these strips, and covered the strips with a protective layer of silicone. This layout meant that the strips were slightly bent from the beginning and required only a tiny, brief pressure to generate 15 microwatts.

The question was where to put the capsule, either in or on the heart, in order to get a similar effect. A study of cardiac anatomy suggested the pericardial sac, at the organ's base, would be ideal. It would squeeze the capsule tightly as the heart contracted while still keeping a firm grip on it when the heart was relaxed.

To test this idea, the capsule's electrodes were attached to a commercial pacemaker that had had its battery removed, and surgically implanted into a 50kg Yorkshire pig. The capsule generated enough power for the pacemaker to function normally. Whether such an arrangement will pass human trials remains to be seen. But if it does, the days of pacemakers that need battery replacements, with all their associated surgery, may be numbered.

Source: The Economist March 23, 2019

#### STRESS AND YOUR HEART

More research is needed to determine how stress contributes to heart disease. But stress may affect behaviors and factors that increase heart disease risk: high blood pressure and cholesterol levels, smoking, physical inactivity and overeating. Some people may choose to drink too much alcohol or smoke cigarettes to "manage" their chronic stress, however these habits can increase blood pressure and may damage artery walls.

And your body's response to stress may be a headache, back strain, or stomach pains. Stress can also zap your energy, wreak havoc on your sleep and make you feel cranky, forgetful and out of control. A stressful situation sets off a chain of events. Your body releases adrenaline, a hormone that temporarily causes your breathing and heart rate to speed up and your blood pressure to rise. These reactions prepare you to deal with the situation: the "fight or flight" response.

When stress is constant, your body can remain in high gear off and on for days or weeks at a time. Although the link between stress and heart disease isn't clear, chronic stress may cause some people to drink too much alcohol which can increase your blood pressure and may damage the artery walls.

Managing stress is a good idea for your overall health, and researchers are currently studying whether managing stress is effective for heart disease. A few studies have examined how well treatment or therapies work in reducing the effects of stress on cardiovascular disease. Studies using psychosocial therapies – involving both psychological and social aspects – are promising in the prevention of second heart attacks. After a heart attack or stroke, people who feel depressed, anxious or overwhelmed by stress should talk to their doctor or other healthcare professionals.

Exercising, maintaining a positive attitude, not smoking, not drinking too much coffee, enjoying a healthy diet and maintaining a healthy weight are good ways to deal with stress.

Medicines are helpful for many things, but usually not for stress. Some people take tranquilizers to calm them down immediately, but it's far better in the long term to learn to manage your stress through relaxation or stress management techniques. Be careful not to confuse stress with anxiety. If you suffer from anxiety, speak with your doctor a treatment or management plan including whether you need medication. Figuring out how stress pushes your buttons is an important step in dealing with it.

Engaging in even one of these following behaviors may mean that you are not dealing with stress as well as you could. Do you tend to:

- eat to calm down?
- speak and eat very fast?
- drink alcohol or smoke?
- rush around but do not get much done?
- work too much?
- procrastinate?
- sleep too little, too much or both?
- slow down?
- try to do too many things at once?

If your stress is nonstop, stress management classes can also help. Look for them at community colleges, rehab programs, in hospitals or by calling a therapist in your community.

Source: https://www.heart.org/en/healthy-living/healthy-lifestyle/stress-management/stress-and-heart-health

	CASE	Events	Calenda	nr - Ma	y 2019	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Golf Weather Permitting T win Willows Golf Club Noon Tee-Off	2 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	3	4
5	6	7 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	8 <b>Golf</b> Weather Permitting T win Willows Golf Club Noon Tee-Off	9 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	10	11
12 Mother's Day	13 Living Safely and Longer at Home Education Evening TFRC 7:00 PM	14 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	15 <b>Golf</b> Weather Permitting T win Willows Golf Club Noon Tee-Off	16 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	17	18
19	20 Victoria Day	21 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	22 Social Breakfast 9:00 AM SEESA Golf Noon Tee off.	23 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	24	25
26	27 Board Meeting Bonnie Doon 9 a.m.	28 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	29 Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off	30 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	31	

	CASE	E Events	Calenda	er - Jur	ne 2019	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	5 Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off	6 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	7 CASE Annual Barbecue 5:00 PM SEES A	8
9	10	11 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	12 Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off	13 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	14	15
16 Father's Day	17	18 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	19 Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off	20 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	21	22
23	24	25 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	26 Golf, Weather Permitting Twin Willows Golf Club Noon Tee-Off Soc Bkfst SEESA 9am	27 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	28	29
30						

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	Canada Day Holiday	2 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	3 Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off	4 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	5	6
	8	9 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	10 Ed Abel Golf Tournament Twin Willows Golf Course	11	12	13
4	15	16 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	17 Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off	18 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	19	20
21	22	23 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	24 Golf, Weather Permitting Twin Willows Golf Club Noon Tee-Off Soc Bkfst SEESA 9am	25 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	26	27
.8	29	30	31			
		<b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	Golf Weather Permitting Twin Willows Golf Club Noon Tee-Off			

	CASE I	Events C	alendar	- Augi	ıst 2019	
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				l <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	2	3
4	Civic Holiday	6 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	7 <b>Golf</b> Weather Permitting T win Willows Golf Club Noon Tee-Off	8 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	9	10
11	12	13 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	14 <b>Golf,</b> Weather Permitting Twin Willows Golf Club Noon Tee-Off	15 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	16	17
18	19	20 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	21 <b>Golf,</b> Weather Permitting Twin Willows Golf Club Noon Tee-Off	22 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	23	24
25	26	27 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	28 Golf, Weather Permitting T win Willows Golf Club Noon Tee-Off	29 <b>Exercise Program</b> Volleyball 3:45 Aerobic/Stretch 4:45	30	31