CARING HEARTS

OFFICIAL JOURNAL OF HEART CARE FOUNDATION

| Vol. VIII | Issue II |
| October-December |
| 2018 |

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Broken heart syndrome

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Snoring

linked to cardiac issues in women

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Chairman's MESSAGE

Dear friends in Heart Care Foundation,

Season's Greetings to all the readers of the 'Caring Hearts' from me and fellow Trustees of the Heart Care foundation. At the outset let me wish all of you a Merry Xmas and a prosperous new year-2019.

The Foundation had to vacate the earlier premises owing to some logistic reasons and was on the lookout for a suitable office space to further its future activities. We identified a new location which is easily accessible by train, metro and bus close to Lisie Hospital. The complete address with phone numbers is given in the publication for the benefit of the members. We also have a new set of officers who will lead the activities of the Foundation the details of them are given elsewhere in the magazine for your information. I welcome Mr Dominic J Mechery as the Executive Director of the Foundation, who has joined us from November 2018.

Padma Shri Awardee
Dr. Jose Chacko Periappuram
Chairman, Heart Care Foundation

The Foundation is planning to roll out its ambitious and challenging project "Hridayapoorvam Alangad" in the coming year. The project when completed will be the first of its kind in the State of Kerala. The project envisages identifying the risk factor of developing heart disease for the people belonging to the age group of 30-60 years in the Alangad Grama Panchayath by screening and advises them the needful to reduce/prevent heart disease.

Also the 'Save a life, Save a lifetime" project is being rejuvenated,so as to broad base this activity in colleges, schools and corporate houses. Hopefully the Foundation should be looking into the second phase of its activities viz;prevention.

So I request the active support and association of all our members and well wishers to help us in all possible ways to make our future activities a great success.

Let me once again wish all of you the best of Xmas and New Year season.

Sincerely,

Dr Jose Chacko Periappuram
Chairman HCF

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MISCARRIAGE MIGHT BE LINKED TO HEART DISEASE RISK, CLAIMS STUDY

Women who experience miscarriages or pregnancy loss and do not have children are at greater risk of cardiovascular problems such as heart disease and stroke, compared with women who have only one or two children.

Women who experience miscarriages or pregnancy loss and do not have children are at greater risk of cardiovascular problems such as heart disease and stroke, compared with women who have only one or two children, says a new study.

It could be because repeated pregnancies could result in long-lasting changes within the body including weight gain, especially around the waist, and increased levels of cholesterol in the blood.

"Conditions such as heart disease and stroke together are the leading cause of death in women in the developed world and it is essential that we understand why this is the case," said Clare Oliver-Williams, a research student from the University of Cambridge.

"There is a relation between cardiovascular disease risk and both pregnancy loss and having a large number of births," Oliver-Williams added.

The study, published in the Journal of Women's Health, also found that women with five or more births had a 38 per cent higher risk of having a serious heart attack, regardless of how long they breastfed.

Since the number of children a woman has also encompassed other factors including child-rearing, age at menopause and health conditions, the researchers say it is unclear whether the increased risk of heart failure, coronary heart disease and heart attacks reflect the direct impact of repeated pregnancies, or the stressors associated with rearing multiple children, or both. During pregnancy, the mother's body experiences changes including weight gain, accumulation of abdominal fat, higher levels of cholesterol, increased insulin resistance, and changes in the structure of the heart.

Although such changes are temporary, they are known to be the risk factors for cardiovascular disease in the general population, the researchers noted.

For the study, the team analysed data from more than 8,500 women, aged 45-64 years.

■

Snoring linked to cardiac issues in women

Snoring may lead to earlier impairment of cardiac function in women than in men. A common but dangerous sleep disorder, OSA causes an increased risk for left ventricular and, more rarely, right ventricular dysfunction in the heart

According to the findings of a recent study, women who snore have a greater cardiac risk.The research was presented at the annual meeting of the Radiological Society of North America (RSNA).

Researchers stated that Obstructive Sleep Apnea (OSA) and snoring may lead to earlier impairment of cardiac function in women than in men. A common but dangerous sleep disorder, OSA causes an increased risk for left ventricular and, more rarely, right ventricular dysfunction in the heart.

OSA is the most common type of sleep apnea. It occurs when the throat muscles intermittently relax and block the airway when a person sleeps. While there are several symptoms of OSA – such as gasping during sleep, waking with a dry mouth, morning headache and irritability – loud snoring is a common sign. Complications of OSA may include

daytime fatigue and sleepiness, complications with medications and surgery and cardiovascular problems.

"Our analysis showed that in both genders of the OSA and snoring groups there was an increase in left ventricular mass, meaning that the walls of the heart's main pumping chamber are enlarged, making the heart work harder," said lead author Adrian Curta. "We also found that men showed an increase in the ejection fraction of both ventricles."

Ejection fraction is the percentage of the heart chamber's total volume that is pumped out with each heartbeat.

When the researchers compared the snoring group to the unaffected group, they found a more significant difference in the left ventricular mass in women than in men. The cardiac changes in the self-reported snorers point to earlier impairment and might be an indication of undiagnosed OSA.

"We found that the cardiac parameters in women appear to be more easily affected by the disease and that women who snore or have OSA might be at greater risk for cardiac involvement," Dr Curta said. "We also found that the prevalence of diagnosed OSA in the study group was extremely low. Together with the alterations in cardiac function in the snoring group, it leads us to believe that OSA may be grossly underdiagnosed."

The findings suggest that the transition from snoring to OSA is an evolving process that is associated with left ventricular hypertrophy, an independent predictor for increased adverse events and in-hospital mortality in many procedures.

Dr Curta stresses the importance for people who snore to get screened for OSA and cautioned that those with OSA should be properly treated.

"I would encourage people who snore to ask their partner to observe them and look for phases during sleep when they stop breathing for a short while and then gasp for air," Dr Curta said. "If unsure, they can spend the night at a sleep lab where breathing is constantly monitored during sleep and even slight alterations can be recorded."

Treatment is dependent on the cause of an individual's OSA, Dr Curta noted. Weight loss, for example, can often improve OSA in overweight individuals. Apart from that, there are surgical techniques and special machines that keep the upper airways open at nighttime by applying continuous positive airway pressure (CPAP).

Late night sleep greater risk

If you are a night owl or prefer sleeping late at night and are having trouble waking up early, then you are at a higher risk of suffering from heart disease and Type-2 diabetes than early risers.

The study showed that people with an evening preference were 2.5 times more likely to have Type-2 diabetes compared to those who are morning larks.

In addition, people with an evening preference have more erratic eating patterns and take more unhealthy diet including more alcohol, sugars and fast food than early risers.

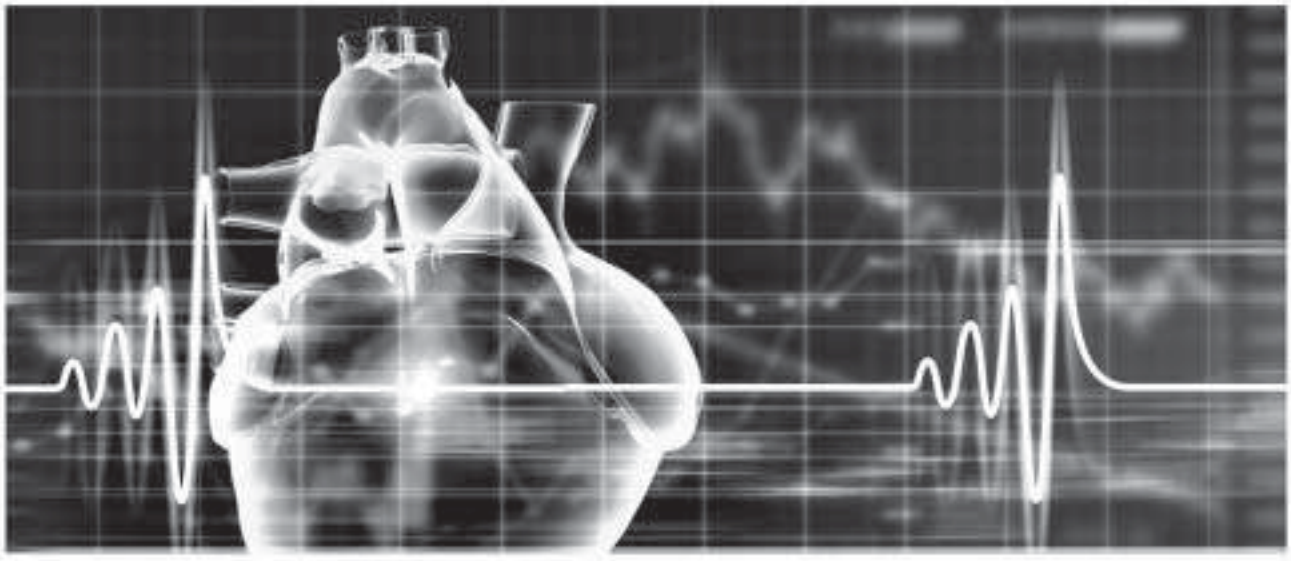
They had a lower intake of fruits and vegetables, and higher intake of energy drinks, alcoholic, sugary and caffeinated beverages, as well as higher energy intake from fat, said Leonidas G. Karagounis, a researcher from Nestle Health Science.

"In teenagers, we also find that evening chronotype is related to more erratic eating behaviour and poorer diet. This could have important implications for health in adulthood as most dietary habits are established in adolescence," said Suzana Almoosawi, research candidate from Northumbria University in the UK.

Eating late in the day was also found to be linked to an increased risk of Type-2 diabetes because the circadian rhythm influences the way glucose is metabolised in the body, the researchers said, in the paper published in the journal Advances in Nutrition.

But I thought it was indigestion?

STEPS TO IDENTIFY A HEART ATTACK



"But it felt like I was having indigestion, except this time it was worse with a sweating". What Mrs Sharma didn't realize was that she was having a heart attack. Thankfully, she was taken to the hospital in time and had an ECG done that showed she was having a ST-elevation myocardial infarction (a heart attack from a totally blocked vessel). I did her angiography that demonstrated a 100% blocked vessel. She required two stents to be placed in the vessel. This is a common theme across various patient encounters. Mrs Sharma was having a heart attack but she didn't realize it. She thought it was something she had at dinner the night before and ignored her symptoms for an entire day. She had taken digene and other home remedies for indigestion but they didn't help.

Most people associate a heart attack with pain in the chest radiating to the jaw and down the left arm. In medical college you are taught of the classic levine sign - where the patient places his clenched fist over the chest to describe the pain. If you are a woman, elderly or diabetic, chances are that you will not have the classic pain but have some variation, as in the case of Mrs Sharma. It is important to know the typical and not to so typical pains that should prompt a visit to your nearest hospital.

Heart disease was once considered an old-age ailment but has now become a common lifestyle concern. Statistics show that the rate of heart diseases in India is double of that of the national averages of western countries. Despite being a growing concern, not many of us are aware of the most common heart attack symptoms.

Most commonly the pain is described as a discomfort, squeezing, tightness, pressure, constriction, crushing, strangling, burning, heartburn, fullness in the chest, band-like sensation, knot in the center of the chest, lump in throat, ache, heavy weight on chest (elephant sitting on chest), like a bra too tight and toothache (when there is radiation to the lower jaw). It is generally not described as sharp, fleeting, knife-like, stabbing, or like pins and needles.

Some features of the pain that suggests it is more likely from the heart -

- Sudden pain radiating to right or left or both arms and/or shoulders
- Left chest pain radiating to the jaw or back
- Pain that worsens on exertion
- Pain associated with sweating
- Pain associated with nausea or vomiting
- Pressure pain
- Worse than previous cardiac pain or similar to the last episode
- Indigestion with sweating

Some features to suggest that the pain is less likely from the heart -

- Pain that worsens with breathing
- A sharp pain that lasts for a few seconds
- Pain that worsens on touching
- Quality and intensity of the pain that changes with position

The above mentioned pains and discomforts do not substitute a doctor's evaluation. It is imperative that if you feel funny or uncomfortable, you get yourself evaluated with a doctor.

On further questioning, Mrs Sharma confessed that she had this feeling of indigestion for about a week, which usually would go away in 15-20 minutes. This time it didn't get better and made her feel quite uncomfortable. She was having warning signs that she ignored. It has been 2 years now and with medication she is doing very well and living a normal life. In fact, she has also started running and ran her first 5K race last week.

■■

New study says cycling 30 miles per week cuts heart disease risk in half

A new, long term study conducted by the University of Glasgow has determined that commuting by bike to work can cut the risk of developing heart disease and cancer nearly in half.

The study, published in the British Medical Journal and conducted over the last five years, also analyzed walking, but determined that individuals who cycle see greater benefits because of the longer distances covered and the intensity of riding a bicycle versus walking.

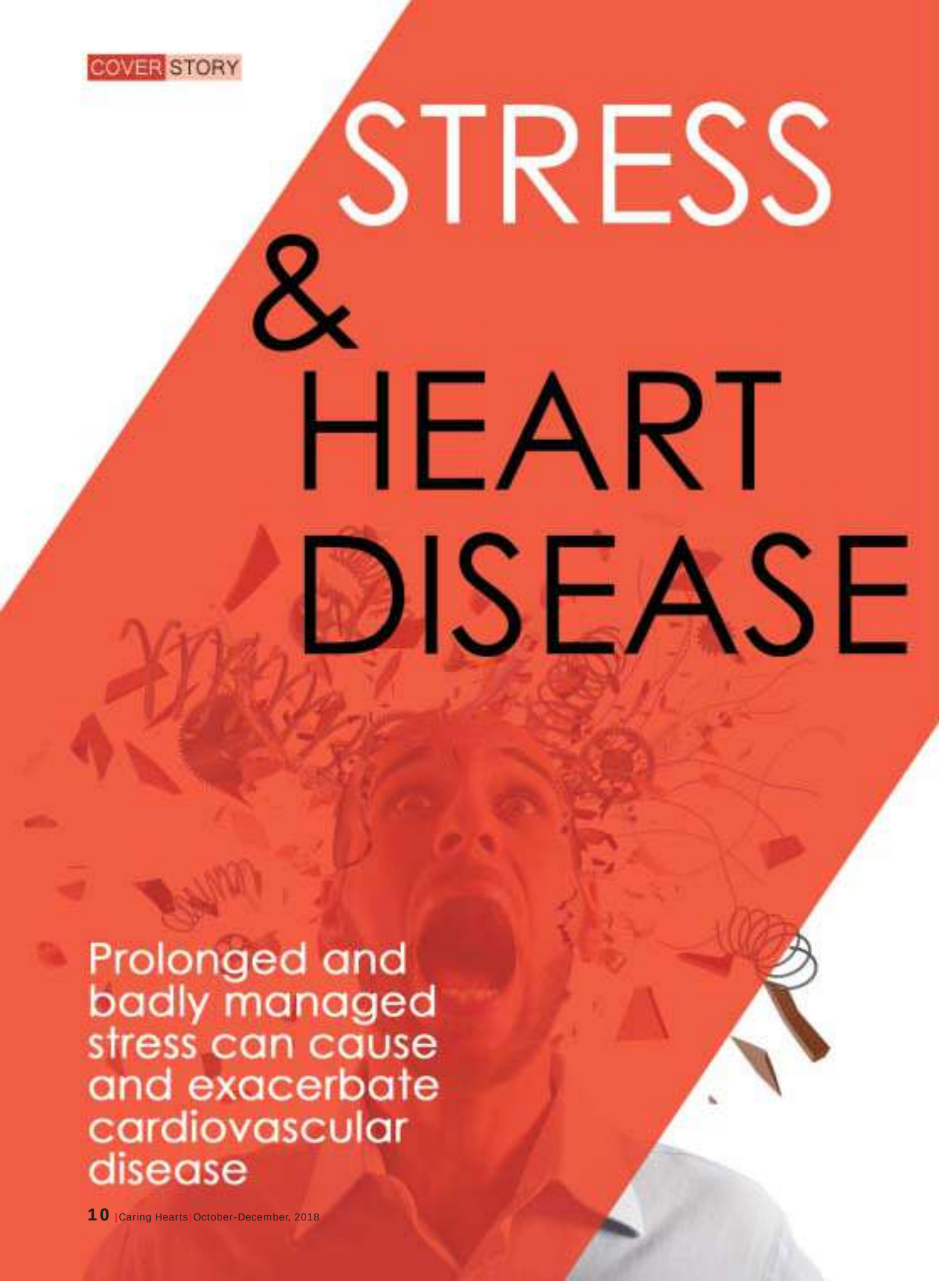
264,337 people took part and researches found cyclists actually had a 41 per cent lower risk of premature death from in comparison to those who regularly travel to work via a vehicle. On top of that, the avid riders in the study had a 46 per cent lower risk of cardiovascular disease and a 45 per cent lower risk of developing cancer.

Researchers from the University of Glasgow believe that these results suggest that city and regional planning policies aimed to allow more accessible bike routes are great opportunities for the improvement of public health.

In the wake of this study, experts are calling for more cycling lanes, bikes shares and other elements to encourage communities to start riding more.

■■

STRESS & HEART DISEASE



Prolonged and badly managed stress can cause and exacerbate cardiovascular disease

Stress has been known to cause or worsen the following cardiovascular conditions: heart attack, high blood pressure, thickening of the arteries (atherosclerosis or plaque formation), thrombosis (formation of blood clots) and stroke.

Many medical doctors believe that occupational, relationship, financial and/or work-related stress is the most important risk factor and cause for coronary heart disease and heart attacks, often starting with a silent elevation in blood pressure.

Research also shows that people who cut their stress levels and keep them under control face a 60% lower chance of suffering a heart attack or stroke than constant worriers.

Go for regular physical check-ups – high blood pressure is a silent disease, as is early diabetes, high cholesterol and thickening of the arteries.

It's important to determine your day-to-day working blood pressure and not only the value that's measured in the doctor's room (while you may be nervous). However, the tendency for your blood pressure to rise, might indicate a reactive narrowing of the blood vessels (arteries) when you experience situations that are stressful for you.

To cut everyday stress, try the following:

- Exercise at least 30 minutes at a time, most days of the week;
- Stick to a regular sleep routine;
- Engage in stress-releasing activities such as yoga or meditation;
- Take up a hobby, such as painting or woodwork;
- Take regular holidays and mini-breaks; and
- Get a pet.

■

Link between stress and heart disease explained

New research suggests that a stressed amygdala may send signals to bone marrow to produce extra white blood cells, which cause arteries to narrow and become inflamed

Scientists state that they may have uncovered a biological explanation for the long suspected link between stress and heart disease.

Potential link

People with a highly active amygdala – a region of the brain involved in stress processing – also have a higher risk of heart disease and stroke, the researchers revealed.

A hard-working amygdala was also linked to increased bone marrow activity and inflammation of the arteries, which may explain the higher heart disease and stroke risk, the team said.

The data suggested that a stressed amygdala may send signals to the bone marrow to produce extra white blood cells, which may in turn cause arteries to narrow and become inflamed, causing cardiovascular problems.

The potential link "raises the possibility that reducing stress could produce benefits that extend beyond an improved sense of psychological wellbeing", said lead

>>Contd... next page

author Ahmed Tawakol of the Massachusetts General Hospital.

Published in *The Lancet* medical journal, the study entailed PET and CT scans of the brain, bone marrow and spleen activity, as well as artery inflammation, of 293 patients.

Subsequent cardiovascular disease

The group was surveyed for 3.7 years on average, during which time 22 suffered "cardiovascular events" – including heart attack, heart failure, stroke and narrowing of arteries, said the study.

"Those with higher amygdala activity had a greater risk of subsequent cardiovascular disease and developed problems sooner than those with lower activity," said the researchers.

In a sub-study, 13 patients with a history of post-traumatic stress disorder were tested separately.

"Those who reported the highest levels of stress had the highest levels of amygdala activity along with more signs of inflammation in their blood and the walls of their arteries," the team found.

The amygdala are almond-shaped neuron clusters deep in the brain thought to regulate emotion, fear, anxiety, pleasure and stress.

Commenting on the study, Ilze Bot of Leiden University in the Netherlands said the data identified chronic stress "as a true risk factor" for cardiovascular diseases.

Given the increasing number of people suffering from job or social stress, doctors may have to include it when they assess an individual's risk for cardiovascular disease, she said.

An old study said chronic stress may trigger an overproduction of white blood cells which clump together on artery walls, restricting blood flow and encouraging clot-formation, to raise heart attack and stroke risk.

Don't let stress manage you

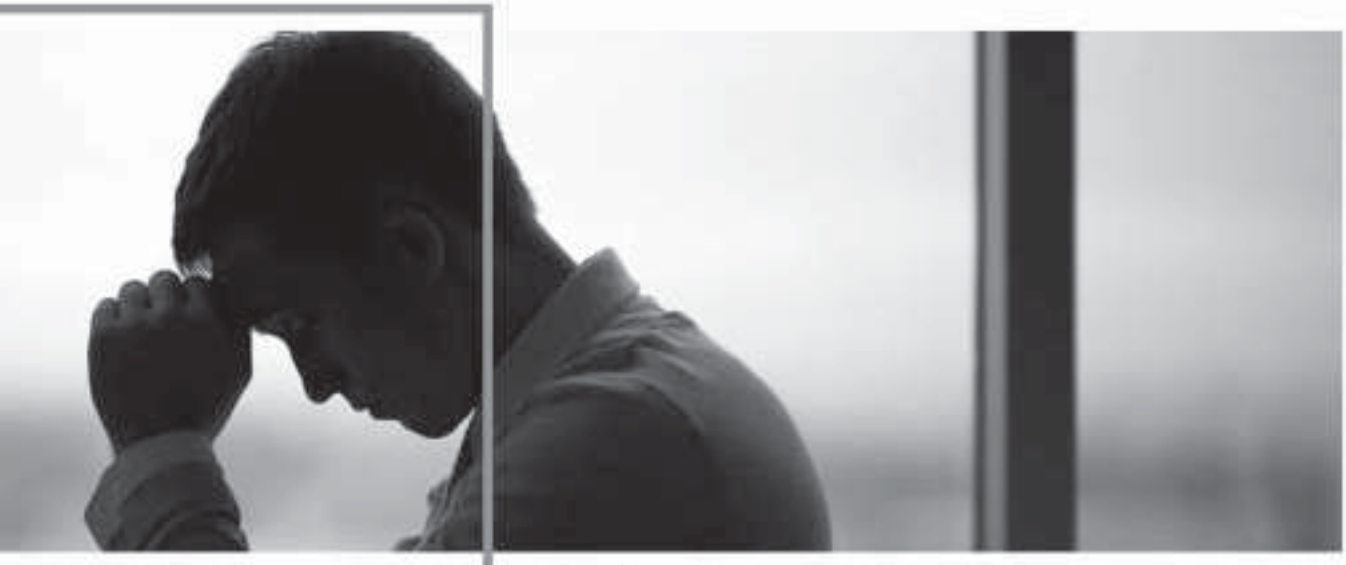
If you've been overdoing things, your body has a way of telling you. If you recognise any of the following symptoms, you may be suffering the effects of stress.

If you've been overdoing things, your body has a way of telling you. If you recognise any of the following symptoms, you may be suffering from the effects of stress, or overfilling your programme:

- headaches
- disturbed sleep
- feelings of anxiety
- tension
- irrational and inappropriate bursts of anger and aggression
- struggling to concentrate
- depression
- increased or decreased appetite

In severe situations you could experience overwhelming stress to the point of so-called burn-out, experiencing extreme fatigue and loss of interest in normal activities.

Since research has shown that high levels of stress



have a negative impact on our immune systems, and hence on our general state of health, it is not unusual for the stressed-out among us to suffer constantly from colds, or other infections or illnesses.

Feeling overwhelmed?

But stress is very much part of the modern lifestyle – traffic, interest rates, school activities and meetings, meetings, meetings. Take some time to learn a few stress management techniques such as:

- Change your diet a little.
- Ask our Natural Pain Relief expert ,or our Tai chi expert about finding a few stretches and moves that will help rid you of that feeling of tightness.
- Take some time to follow the steps of a stress management programme.

16 tips to manage stress

How well do you manage stress in your life? Here are some tips to help you deal with stress in a healthy and effective way.

How well do you manage stress in your life? Here are some tips to help you deal with stress in a healthy and effective way:

- Effective time management, planning and organisation
- Relax – have breaks during the day, especially at work
- Accept your circumstances and do not compare yourself to another individual – you are unique
- Exercise - the Heart and Stroke Foundation SA recommends that an adult exercise at least 5 times a week for 30 minutes
- Reduce excess weight – follow a healthy well balanced eating plan
- Drink lots of water
- Develop a positive outlook – confess positive affirmations
- Set boundaries in your life
- Develop routine and structure
- Sleep for at least 6 hours
- Avoid addictions i.e. TV, drug, alcohol, etc.
- Try aromatherapy or massages
- Have realistic goals
- Don't be a people pleaser – learn to say NO
- Recognise what you can change – don't waste time with the "if only's", the past is the past
- Have a great support network (friends)

The more you can do to find healthy ways of managing stress today, the better your life and heart will be.

HEART STUDY

'Broken heart syndrome' warrants careful monitoring

Broken heart syndrome - also called Takotsubo syndrome - causes symptoms similar to a heart attack, including chest pain and difficulty breathing - and still puts patients at high risk for hospital readmission and in-hospital death

It's not a heart attack, but so-called "broken heart syndrome" still puts patients at high risk for hospital readmission and in-hospital death, a new study suggests.

Broken heart syndrome - also called Takotsubo syndrome - causes symptoms similar to a heart attack, including chest pain and difficulty breathing.

But while a heart attack is caused by severely blocked arteries, broken heart syndrome is typically brought on by stressful events and involves sudden weakening of the heart muscle.

Although the syndrome is thought to be temporary, the study found subsequent heart problems were not uncommon.

"Takotsubo patients should be given a detailed discharge plan and counseled on potential reasons to revisit their doctor, such as difficulty breathing or swelling of the legs," said the study's co-lead investigator, Dr Nathaniel Smilowitz. He's an assistant professor of medicine at NYU Langone Medical Center in New York City.

"These are very sick patients who need close follow-up," Smilowitz said in a hospital news release.

The researchers analysed data from more than 61 400 people hospitalised with broken heart syndrome. They found that 12% were rehospitalised within 30 days of discharge. Of those, nearly 4% died after readmission.

Among heart attack patients, the rates were 17% and 7%, respectively, according to the study.

"Our findings show that Takotsubo syndrome still presents considerable risk to patients after they're initially discharged from the

hospital," said senior investigator Dr Harmony Reynolds, an associate professor of medicine at NYU Langone.

"Even though the heart muscle recovers full function in survivors, there are lasting effects on the body. Physicians should monitor Takotsubo patients carefully," Reynolds said.

The researchers noted that the most common cause of hospital readmission among patients with broken heart syndrome was heart failure. It was diagnosed in 11% of broken heart syndrome patients and in 13% of heart attack patients.

The study also found that compared to heart attack patients, broken heart syndrome patients were younger and more likely to be women.

They also had fewer risk factors for heart disease, such as diabetes and obesity, but were more likely to have other non-cardiac illnesses such as depression, rheumatoid arthritis, or chronic pulmonary disease. ■■

Today's fast-paced world taking toll on too many hearts

Weekday mornings are no longer the most common time for cardiac arrest - we now live in a fast-paced, "always-on" era that causes increased stress and, possibly, an increase in the likelihood of sudden cardiac arrest

Weekday mornings are no longer the most common time for cardiac arrest, as an ever stressful world means hearts are stopping suddenly at all times of the day, new research shows.

"While there are likely several reasons to explain why more cardiac arrests happen outside of previously identified peak times, stress is likely a major factor," said lead investigator Dr Sumeet Chugh. He is associate director of the Smidt Heart Institute at Cedars-Sinai Medical Center in Los Angeles.

"We now live in a fast-paced, 'always-on' era that causes increased psycho-social stress and, possibly, an increase in the likelihood of sudden cardiac arrest," Chugh said in a Cedars-Sinai news release.

For the study, Chugh's team analysed data on cardiac arrests in Oregon for ten years.

Of the 1 535 people who died from sudden cardiac arrest, only 14% died between the hours of 06:00 and 10:00, and there was no evidence that more cardiac arrests occurred on Mondays.

Along with stress, other factors that may explain the findings include changes in how high-risk patients are being treated, and problems with how past studies have measured time of death caused by cardiac arrest, such as using time of death on a death certificate rather than the actual time of death due to cardiac arrest, the researchers added.

Cardiac arrest is different than a heart attack, which is typically caused by reduced blood flow to the heart due to clogged arteries. Cardiac arrest is caused by defective electrical activity of the heart. Patients may have little or no warning, and usually experience sudden death. Each year in the United States, there are about 300 000 deaths from sudden cardiac arrest.

"Because sudden cardiac arrest is usually fatal, we have to prevent it before it strikes," Chugh said. "This is just another piece to the puzzle. Our next steps are to conclusively determine the underlying reasons behind this shift, then identify public health implications as a result." ■■

Noisy neighborhood?
Your heart may pay a price

Living in noise-saturated neighborhoods might be more than simply annoying, with new research suggesting it seems to raise the risk for serious heart problems

Chronic noise from traffic and airports appears to trigger the amygdala, a brain region critically involved in stress regulation, brain scans have revealed.

Noise is also associated with increased inflammation of the arteries, which is a risk factor for stroke, heart attack and heart disease, said lead researcher Dr. Azar Radfar.

She is a research fellow at Massachusetts General Hospital in Boston.

"We are not the first group talking about noise and cardiovascular disease," Radfar said. "What we really show here is the mechanism linking noise to major adverse cardiovascular events."

For the study, Radfar and her colleagues analyzed imaging scans of 499 healthy people, looking specifically at their brains and blood vessels.

The investigators then used the participants' home addresses to obtain noise level estimates of their neighborhoods, based on aviation and highway noise data kept by the U.S. Department of Transportation.

People in the noisiest neighborhoods had higher levels of activity in their amygdala and more inflammation in their arteries, the researchers found.

The research team then followed the study participants for an average 3.7 years, to see if these symptoms of stress would lead to heart problems.

The findings showed that people exposed to chronic noise had a greater than threefold risk of suffering a heart attack, stroke or other major cardiovascular event,

compared with people who had lower levels of noise exposure.

That risk remained elevated even after the researchers accounted for other risk factors, such as air pollution, high cholesterol, smoking and diabetes.

But the study could not prove that noise caused heart risks to rise.

Still, the amygdala appears to increase heart risk by triggering the release of hormones that fuel blood vessel inflammation, the researchers concluded.

Dr. Nieca Goldberg is director of the NYU Langone Tisch Center for Women's Health in New York City. She said, based on this research, noise is "a link in the chain of cardiovascular risk, and I think it is an interesting question for doctors to ask their patients when assessing their cardiac risk."

Radfar even suggested that people affected by transportation noise might consider soundproofing their homes.

On a community level, highway and urban planners can protect the populace by making road-noise barriers a part of road construction, Radfar suggested.

And, Goldberg added, if you're in a noisy neighborhood, you might also want to consider other ways to reduce your stress. These might include yoga, meditation or aerobic exercise.

The findings are to be presented Nov. 11 at the American Heart Association's annual meeting, in Chicago. Such research is considered preliminary until published in a peer-reviewed journal.

■

Parent's exposure to dirty air may spell heart trouble for offspring, study suggests

A parent's exposure to dirty air before conception might spell heart trouble for the next generation, a new animal study suggests.

Wondering about the possible health risks for children of people routinely exposed to highly polluted air, including soldiers and residents of some of the world's largest cities, researchers from The Ohio State University studied the effects of dirty air on mice.

And they found an abundance of evidence of harm to the offspring of parents that routinely breathed dirty air prior to mating.

"We found that these offspring had a variety of heart problems during the prime of their lives and the effects were so robust that it was somewhat shocking," said study senior author Loren Wold, director of biomedical research at Ohio State's College of Nursing.

Heart function was impaired. Inflammatory markers linked to increased heart disease risk were high. They had markers of oxidative stress, a condition in which levels of beneficial antioxidants are low. Calcium regulatory proteins, which are critical to the function of the beating heart, were altered. And these mice were young and otherwise healthy - comparable to 20-year-old humans.

The first-of-its-kind study appears online today in the *Journal of the American Heart Association*.

The study focused only on male offspring because the research team wanted to narrow its focus on this first experiment. Going forward, they plan to compare male and female offspring, try to determine which parent's exposure might matter more to offspring, evaluate heart health later in the lifespan of the mice and explore potential changes in the eggs and sperm of mice exposed to dirty air.

■

Odd reasons that can give you Heart attack

Did you know early periods, break offs or being lonely put you on a higher risk of having heart attack? If not, here are some of the shocking factors leading to heart attack that you should be aware of

Obesity, lack of exercise, smoking, high blood pressure, shooting cholesterol, a strong family history, stress and a bad diet are the obvious triggers of heart disease. That's what most of us know and even the American Heart Association validates. But did you know your break-ups, feeling of loneliness and even getting periods at an early age can give you heart attacks? Shocking,

aren't they. Here we have a host of strange factors that can cause heart attacks. This means apart from being cautious about the factors causing heart attacks that everyone knows, you do need to be careful about these sneaky ones.

Had a bad flu? Check your heart now

In case you have recently suffered from a flu, you must go for a heart checkup as well. Reason, a study published in the New England Journal of Medicine shows that having flu increases the risk of heart attack six-fold. If you find it difficult to breathe laying down or you are swollen after a flu, you need an immediate heart screening.

You have got your first flow before 12

Your periods and heart – yes, they are connected. May be weird but true. A recent heart study published in the Journal of Paediatric Endocrinology and Metabolism shows that those women have got their periods before the age of 12 are at 10% greater risks of having heart disease. Another research revealed that increased levels of oestrogen, a hormone playing essential role in puberty, shoots up the risk of blood clots and strokes for lifetime.

When you are lonely

Bizarre but true, loneliness too can make your heart fall sick as much as smoking can do. It puts you at 30% higher risk to suffer from heart attacks. So, try not to feel lonely, make friends, get a pet, bid adieu to social media. These might help you overcome loneliness.

Taking diet pills hurts your heart

Your diet pills usually do not work on slimming you down but clearly affect your heart by increasing your blood pressure and stressing it out, says doctors. More the diet pills you take, more the chances that you may have an ailing heart.

Heart breaks ache your heart

In case you have recently had a break off or you have lost someone very close or you have gone through anything that is heart breaking, you can suffer from broken heart syndrome. Acute emotional distress can upset your heart and lead to heart attacks.

Glasses of wine every night not good for heart

Alcohol isn't good for your heart. While your heart can still bear moderate drinking, having two daily pegs of alcohol can absolutely affect your heart's health and put you at a much greater risk of heart attacks.

Study

Frequent sauna use may boost heart health

Regular sauna use is associated with a lower risk of death from cardiovascular disease (CVD) in people aged 50 years and above, a new study says.

This is because the sauna lowers blood pressure - a key factor for increased risk of heart disease and death.

The study found that mortality from CVD among people who used a sauna four to seven times a week was 2.7 fatal CVD events, compared to 10.1 events in those who used a sauna once a week.

"More regular sauna use is associated with a lower risk of death from CVD in middle-aged to elderly women as well as in men," said Professor Jari Laukkanen from the University of Eastern Finland.

"There are several possible reasons why sauna use may decrease the risk of death due to CVD. Our research team has shown in previous studies that high sauna use is associated with lower blood pressure," said Laukkanen.

Additionally, sauna use is known to trigger an increase in heart rate equal to that seen in low to moderate intensity physical exercise - known to be good for patients with heart disease.

For the study, the researchers involved 1,688 participants with an average age of 63 years and followed them for 15 years. 51.4 per cent of the participants were women.

Marathons increase heart stress?

A new "Research Letter" published in the American Heart Association's journal Circulation raises the old fear that running long distances - particularly the 26.2-mile marathon - could be bad for amateur runners. But according to several experts, including the paper's author, would-be marathoners should not worry that they are on the road to a heart attack or heart disease, though it is smart not to attempt the marathon distance until you have trained sufficiently.

A group of Spanish physiologists reported that "the strain imposed on the myocardium by competing a full marathon is much greater compared with other distances such as the half-marathon or 10-km races." They came to that conclusion by measuring the same proteins in runners' blood that doctors look at to diagnose heart attacks. The biomarkers — cardiac troponins — were elevated in all 63 runners (39 women and 24 men, with an average age of 37) after completing their races, but particularly so among the marathon runners.

However, the Spanish team made no claims about heart attack or heart disease risks among the marathon runners. Indeed, the Letter notes that "the release of cardiac troponins after exercise may not be indicative of any cardiovascular dysfunction."

This is precisely the finding of other studies published over the last decade, including a handful in Circulation. "I don't see anything new here, and the increased likelihood of a troponin bump with marathon vs. shorter distances has been well described before," Malissa Wood, of Boston's Massachusetts General Hospital, told me by email.

Wood was a co-author of the first major paper on the subject, which appeared in Circulation in 2006. That investigation followed 60 nonelite participants in the 2004 and 2005 Boston Marathons. All had unmeasurable troponin before the marathon, but more than 60 percent had levels greater than 99 percent of normal post marathon.

Still, the paper concluded: "There are no data to suggest that there are long-term sequelae to the increase in biomarkers." In other words, no subsequent heart damage.

Hartford Hospital's chief of cardiology, Paul Thompson, has been researching the exercise-heart connection for 40 years, including work with Wood and others on cardiac troponins. "We've long known that troponins increase after exercise," he said in an email. "The new Research Letter's small contribution is to suggest that long-term effects should be studied. We all agree with this, and lots of groups, including ours in Hartford, are already doing this."

In 2010, a team of internationally known exercise cardiologists, including Wood and Thompson, collaborated on a "State-of-the-Art Paper" for the Journal of the American College of Cardiology. The authors noted the explosion in exercise-and-troponin papers "due to the development of highly specific cardiac troponin assays coupled with theoretical concern about the cardiovascular safety of prolonged exercise." Yet they concluded: "Because most of these data involve healthy individuals with no underlying cardiovascular disease, it seems likely that exercise-induced cardiac troponin release is a benign process."

In 2014, a systematic review of "High-sensitivity troponin after running" reached a similar finding. The authors could locate no "pathological studies" linking post-exercise troponins to clinical heart illness. A 2012 paper in the Journal of Applied Physiology had demonstrated that 14-year-old cross-country runners also developed high troponin readings after a 90-minute treadmill workout. But the teens had no adverse clinical symptoms, continued racing for their youth teams, and clearly represented a group with little to no coronary risk.

A group of Spanish physiologists reported that "the strain imposed on the myocardium by competing a full marathon is much greater compared with other distances such as the half-marathon or 10-km races.

The Spanish team has been studying marathoners since 2011, according to lead researcher Juan Del Coso, from Madrid's Universidad Camilo José Cela. When they noticed many runners walking in the final miles, they wondered about the runner's training programs for the event. The researchers first studied skeletal muscle strain among runners and found that those who trained less produced more markers of muscle damage. This led them to wonder about heart muscle damage, which produced the Research Letter results.

"I do not think the increased cardiac strain is going to produce a heart problem per se," Del Coso wrote in an email. "If you've prepared correctly, which includes training, nutrition, and hydration strategies, then there is no reason to stop running marathons."

Meanwhile, support for the benefits of regular, even intense, aerobic exercise remains as strong as ever. A month-old Cleveland Clinic paper tracked the mortality rates of 122,000 patients for a median 8.4 years after they had undergone treadmill stress testing. Subjects at the highest level of fitness, termed "elites," had an 80 percent lower risk of death than the lowest, most sedentary subjects.

"Current endurance athletes should not be worried," said Hartford's Paul Thompson. "They always live longer than their sedentary peers, and there remains no conclusive evidence that their exercise is dangerous." ■

HEART STUDY

Six unusual signs that you may have heart disease

1. Creased earlobes

Studies have shown that there is an association with the visible external crease on the earlobe and increased risk of atherosclerosis, a disease where plaque builds up inside your

2. Fatty bumps

Another external indicator of heart issues is yellow, fatty bumps – known clinically as "xanthomas" – that can appear on the elbows, knees, buttocks or eyelids. The bumps themselves are harmless, but they can be a sign of bigger problems.

3. Clubbed fingernails

A phenomenon known as digital clubbing may also be a sign that all is not well with your heart. This is where the fingernails change shape, becoming thicker and wider, due to more tissue being produced. The change is usually painless and happens on both hands.

4. Halo around the iris

Fat deposits may also be seen in the eye, as a grey ring around the outside of the iris, the coloured part of the eye. This so-called "arcus senilis", starts at the top and bottom of the iris before progressing to form a complete ring. It doesn't interfere with vision.

5. Rotten gums and loose teeth

The state of your oral health can also be a good predictor of the state of your cardiovascular health.

The mouth is full of bacteria, both good and bad. The "bad" bacteria can enter the bloodstream from the mouth and cause inflammation in the blood vessels, which can lead to cardiovascular disease.

6. Blue lips

Another health indicator from the mouth is the colour of your lips. The lips are usually red, but they can take on a bluish colour (cyanosis) in people with heart problems, due to the failure of the cardiovascular system to deliver oxygenated blood to tissues.

Awareness class on basic life support-CPR at Novelty Textles

An awareness class on Basic Life Support-CPR for the benefit of the staff of the Novelty Textiles was held on December 02, 2018 at Novelty Textiles meeting hall. Awareness class was led by Dr.Jacob Abraham(Trustee HCF) and was ably supported byMr. Aloysius (Anesthesia Technician Lisie Hospital)and Mr. Arun S U Program Coordinator H C F. Arrangements were made by Mr.Dileesh Kumar(Operation head NCPL), Mr.SijoyAbraham (Chief Operating Officer NCPL) and Mr.Shaju Varghese(General Manager NCPL)

The meeting commenced with a prayer and was followed by welcome speech by Mr.Dileesh Kumar. In his welcome speech he was very appreciative of the good number of participants that too on Sunday. He also informed the participants that the class would be of use for everyone during their life time.

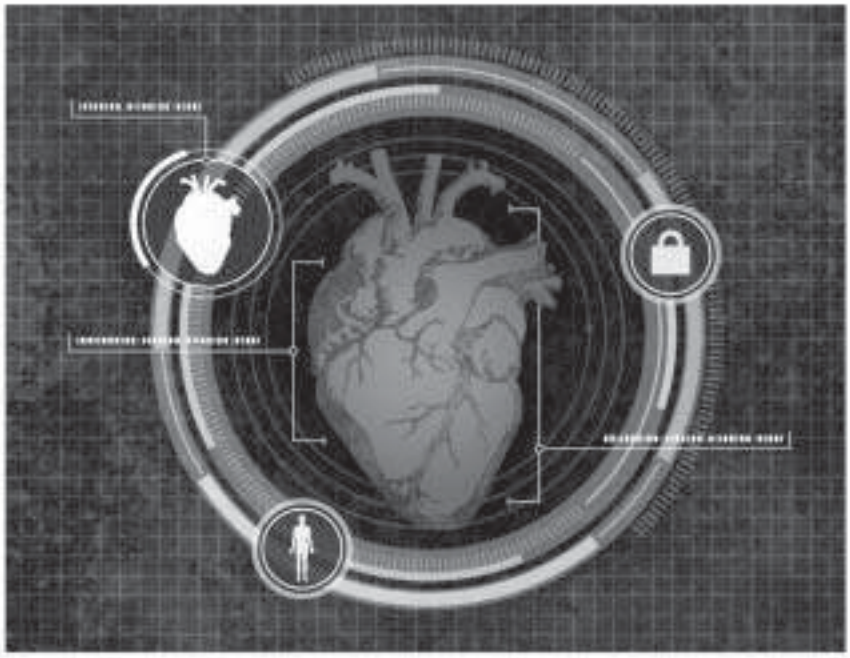
Mr.Shaju Varghese handed over a chequefor Rs15000 to Dr.Jacob Abraham Trustee, Heart Care Foundation as the first installment towards 'Caring Heart'magazine from the Novelty Textiles.

Dr.Jacob Abraham then went on to make a detailed presentation about CPR,there were 122 participants who attend the awareness class. Doctor expressed his happiness on seeing the number of participants for the classespecially on a Sunday. Doctor gave a brief on Heart Care Foundation and its projects .The medium of class was in Malayalam and it was received well by the participants. During the class Doctor narrated real life incidentsin the use of CPR and thereby conveyed the need of knowing these skills to the participants.Doctor was ably assisted by Mr.Aloysiuswho performed CPRDemonstration and explained how touse it on the adults and children. A booklet on CPR was distributed to all participants.

Doctor took time to answer all the queries of the participants and allowed some participants to have a feel of the real time operation by using the mannequins for demonstration.

Mr.SijoyAbraham proposed the vote of thanks. The host had arranged refreshments for the participants.

Coming soon, Computers that will read your heart tests



Tapping into the technology behind facial recognition programs and self-driving cars, researchers in a new study have taught computers key elements of assessing echocardiograms.

The advance might simplify an otherwise extensive process now done by humans.

Researchers created algorithms to recognise images and potential heart problems that echocardiograms commonly capture, including enlarged chambers, diminished pumping function and even some uncommon diseases.

The computers accurately identified thousands of echocardiogram images and came up with measurements on them that were "comparable with or superior to manual measurements," according to authors of the study, published in the journal *Circulation*.

Echocardiograms help doctors evaluate heart function by using sound waves to create snapshots of every part of the organ.

Because they don't give off radiation and can be given easily in a medical office, they're a popular imaging choice to diagnose heart disease.

But, Dr Rahul Deo, the study's senior author, said they're not done enough because the process of assessing results is long and taxing.

"It can be tedious to collect everything and interpret all that information. You need specialists on both ends, both to acquire the data and to interpret it, so it often becomes a tool that's used when there are already symptoms or when (heart) disease has sort of already progressed," said Deo, chief data scientist at One Brave

Researchers in a new study have taught computers key elements of assessing echocardiograms, an advance that might simplify an otherwise extensive process now done by humans.

Idea, an organisation centered on finding new ways to fight heart disease. It is partially funded by the American Heart Association.

Conditions such as diabetes and high blood pressure, risk factors for cardiovascular disease, often change the structure and function of the heart muscle years before the onset of any symptoms, he said.

"We wanted to figure out how to get studies done at an earlier level… picking up severe cases earlier on, even when people don't have any symptoms."

Looking at 14 035 echocardiograms, collected over 10 years from a University of California San Francisco database, researchers fed 23 views of each heart chamber from every test into a computer algorithm.

They also provided labels for every specific, identifiable image captured.

The result was a set of programs that, ultimately, independently identified images, provided measurements and spotted potential problems.

Deo said automating echocardiogram interpretation could help "democratise" the tests, allowing them to be conducted in more settings, such as primary care offices or rural areas that lack cardiologists and other medical specialists.

An estimated 7.7 million echocardiograms were performed in US hospitals from 2001 to 2011, a period that saw the use of the tests grow at an average annual rate of 3.41%, according to one study.

The process of assessing echocardiograms is still a long way off before there's no longer a need for human expertise, said Dr Mario Garcia, chief of cardiology at Montefiore Medical Center in New York City.

"To arrive at a diagnosis and decide upon a treatment, you need not only the interpretation of the images, but you need to know the patient's symptoms and incorporate that with other medical information that's available - like what's the patient's blood pressure, and what have other tests that have been conducted show?" said Garcia, who was not part of the study.

Garcia, who estimates his hospital conducts anywhere between 25 000 to 30 000 echocardiograms a year, said the accuracy of the automated measurements in the study demonstrate "a real advancement" in technology, but disease detection isn't foolproof.

"You may have the diagnosis being made correctly 85% of the time, but what do you do in the other 15% if you are wrong?" he said. "A 15% error in medicine is not an acceptable rate."

Garcia compared it to the automation of the stock market over the past several decades.

"The development of computers was important for getting data in the stock market," he said, "but deciding whether to use that data to actually make an investment still requires a human being."

■■

TECH to save remote patients

There is some good news for heart patients in remote places. Scientists at the Indian Institute of Technology, Hyderabad (IIT-Hyderabad) have developed a new algorithm that promises to help transmit heart parameters even on a low-bandwidth network and make it easier for cardiologists to interpret the data.

Many heart patients need to keep a check on their health by regular monitoring of heart parameters. In India, in every one lakh, heart patients about 5000 need such regular monitoring. While portable devices are available to help continuously monitor the status of the heart, cardiologists who can interpret such data are mostly not available in rural areas. Telemedicine can bridge this gap by helping to transmit the data to specialists over a telephone or other networks. But such transmission of this data – which is massive - requires high bandwidth networks and a specialist to sift through it.

5 reasons to eliminate TRANS FATS FROM YOUR DIET

Various studies have shown that avoiding trans fats as much as possible can help you yield amazing health benefits. In fact, many doctors consider trans fats as the worst type of fat one can eat. Unlike dietary fats that are found in a variety of plant-based foods and oils, trans fats raise LDL 'bad' cholesterol and lower HDL 'good' cholesterol, making you more prone to heart disease and abdominal obesity. It is said that worldwide, intake of foods high in trans fats causes more than 500,000 deaths from cardiovascular disease every year.

Also known as trans-fatty acids, this type of fat is found naturally in the gut of some animals and foods made from these animals. Artificial trans fats are produced in an industrial food processing method called partial hydrogenation, which involves adding hydrogen to liquid vegetable oils to make them more solid. Recently, the Food Safety and Standards Authority of India (FSSAI) launched a mass media campaign urging the elimination of industrially produced trans-fat in the food supply. The campaign titled 'Heart Attack Rewind' supports FSSAI's global target of eliminating trans-fat in India by 2022, a year ahead of the global target by the World Health Organisation, the FSSAI said in a statement

How do trans fats affect your health?

Trans fats, which are a form of unsaturated fat, have no known health benefits, and there is no safe level for consumption. Eating foods rich in trans fats are linked to various health conditions. Here are five reasons why you must eliminate trans fats from your diet.

Heart disease: Studies have found that trans fats significantly increase your risk of heart disease by raising bad cholesterol. However, this type of fat does not increase your good cholesterol.

Type 2 diabetes: Eating trans fats is linked to an increased risk of developing type 2 diabetes, although the link between trans fats and diabetes risks is not completely clear. Yet, researchers suggest that trans fats may cause insulin resistance and drive type 2 diabetes.

Belly fat: Consuming lots of trans fats can give you a pot belly. According to a study conducted by researchers at Wake Forest University, trans fats increase the amount of fat around the belly. This means not only trans fats make you fatter but can move fat from other regions to the belly, leading to abdominal obesity

Inflammation: Trans fats have been shown to increase inflammation, especially in people who are overweight or obese, in both clinical trials and

Trans fats can increase your risk of developing certain health conditions, including heart disease. Read on to learn how consuming trans-fatty acids can increase your health risks and make you fat

observational studies. It may be noted that chronic inflammation has been associated with certain diseases, including heart disease, stroke, autoimmune disorders like rheumatoid arthritis and lupus.

Cancer: While intake of trans fats before menopause was linked to an increased risk of breast cancer after menopause in the Nurses' Health Study, there is weak and inconsistent evidence for a relationship between trans-FA and cancer risk. But trans fats are found in he high-calorie, fatty baked goods and other foods that can cause belly fat, which is a risk factor for cancer.

Heart Care foundation gets a new address

The Secretariat of the Heart Care Foundation which was functioning at 42/ 2033, Anathanam Studios, Old Railway Station Cross Road, Ernakulum moved in to a new premises .The new office located near Lisie Hospital is easily accessible by Metro, Bus, and Railway station. The office is situated on the second floor of Aachus complex at Kottecanal Junction, Lisie Hospital Road. The new secretariat is now functioning from a more spacious and well-furnished office space.

In a simple but a solemn function the blessing of the new office Secretariat was done on November 10, 2018, in the presence of Dr Jose Chacko Periapuram,

Chairman of the Foundation, fellow Trustees and new officers. Fr. Jose Thachil the Spiritual Director of Lisie Hospital blessed the new office space. The Trustees had an informal meeting immediately after the blessing to chart out the new programs of the Foundation.

What your heart rate is really telling you

Perching nervously on the edge of my sofa, I clutch my smartphone in my left hand and press my right forefinger over the camera.

The device begins beeping, while numbers flash on the screen. I know not what they mean, nor why they're changing, but I'm about to discover my heart rate – courtesy of an app I've downloaded. It cost just €2 ($3), which sounds like a fair price for the infinite number of times it allows me to check my ticker.

After a few seconds, the result is revealed: 71 beats per minute (bpm). To my relief, this is categorised by the app's sliding scale as "normal", as opposed to "slow" or "fast". The "fast" section of the scale is coloured an alarming red, presumably to indicate danger.

But if I found myself in the red, what would that actually mean? A warning of an imminent heart attack, or simply the need to get off my sofa and on to the treadmill?

Tachycardia is the term used to refer to a high resting heart rate – typically more than 100bpm. If left untreated, it can disrupt normal heart function and lead to heart failure, stroke, cardiac arrest or death.

Which is enough to set your heart racing with anxiety. But if you do download an app, or are already using one, it'simportant to know what the data actually means.

Christopher Allen, a senior cardiac nurse with the British Heart Foundation, cautions that "before you start to analyse something you have to understand it. As a general guide, a resting heart rate between 60 and 100 is acceptable. The closer you get to 100, the more you might think 'does it really need to be that high?'"

It can be brought down by exercising more, reducing stress, avoiding tobacco and, if necessary, losing weight – all basic steps we already know we should be taking for our health. So do we really need to be monitoring our heart rates, too? "It depends on why you're looking at it," says Allen. "What you get from heart rate in isolation isn't always that useful." And, he warns, "curiosity is a dangerous thing if you don't really know what you're looking at".

Paradoxically perhaps, it's the younger generation who are more likely to use digital technology to check on their health, but the over-40s who more likely need to.

"Over 40 we would start to say get your blood pressure and

cholesterol checked because that's when risks start to go up," says Allen.

App accuracy varies

Those at risk of heart attacks caused by problems such as high blood pressure or diabetes may be just as likely to be female as male in future, too. Although men in Britain currently face triple the risk of heart attack because their lifestyles are generally less healthy, researchers from Oxford University revealed last week that per person, smoking, high blood pressure and diabetes produced a higher chance of heart attack in women.

Which is enough to set your heart racing with anxiety. But if you do download an app, or are already using one, it'simportant to know what the data actually means

But high blood pressure and high resting heart rate are not the same. While the latter refers to the speed at which the heart beats, blood pressure is a measure of the force your heart uses to pump blood around the body. If left untreated, those with high blood pressure, or hypertension, are at increased risk of serious problems such as heart attacks and strokes. Apps can be used to track blood pressure as well as heart rate.

So if you are going to measure your heart rate at home, what do you need to know? Allen advises to measure it a few times to obtain the true reading. "It's so responsive, it can shoot up by 30 to 40 beats per minute if you're anxious," he says.

The other important consideration is app accuracy. A study last year found huge variability between commercially available heart rate monitoring apps – even those using the same technology.

"Once people see them it is human nature to compare their results with others," said author Dr Christophe Wyss, a cardiologist at Heart Clinic Zurich in Switzerland. "The problem is that there is no law requiring validation of these apps and therefore no way for consumers to know if the results are accurate."

Yet with our ever intensifying focus on wellness and self, we can find ourselves overlooking such caveats. Aided by technology we obsess, more than ever before, over everything we eat and drink, how much we move, sleep, relax, deep breathe and look at screens, and have fetishised the collection of data on ourselves.

However, a growing number of GPs – more often the younger ones, perhaps – welcome the trend for self-tracking. "Anything that makes a patient engage with their health is useful," says Dr Luke Kane, a GP in Camden, north London.

'Future of medicine'

More useful than heart rate measurement, however, is the self-tracking of irregular pulses, Dr Kane argues. Abnormal heart rhythm, or arrhythmia, can affect people of any age and may cause dizziness, fainting palpitations and shortness of breath. "It's hard to catch people in [the process of experiencing] irregular heartbeats because they can go in and out of them," he says.

There is therefore a role for checking it every day on your phone for a few months, he suggests. This could help build up a picture for your doctor.

"That could have a massive impact on how many people have strokes," says Dr Kane, explaining that patients identified as at risk could be offered blood-thinning medication.

Used correctly, he believes, smartphone technology that can reach those in danger is "really a game-changer. This will be happening everywhere in five years. It is the future of medicine." ■

Tips to keep your Heart Healthy at Work

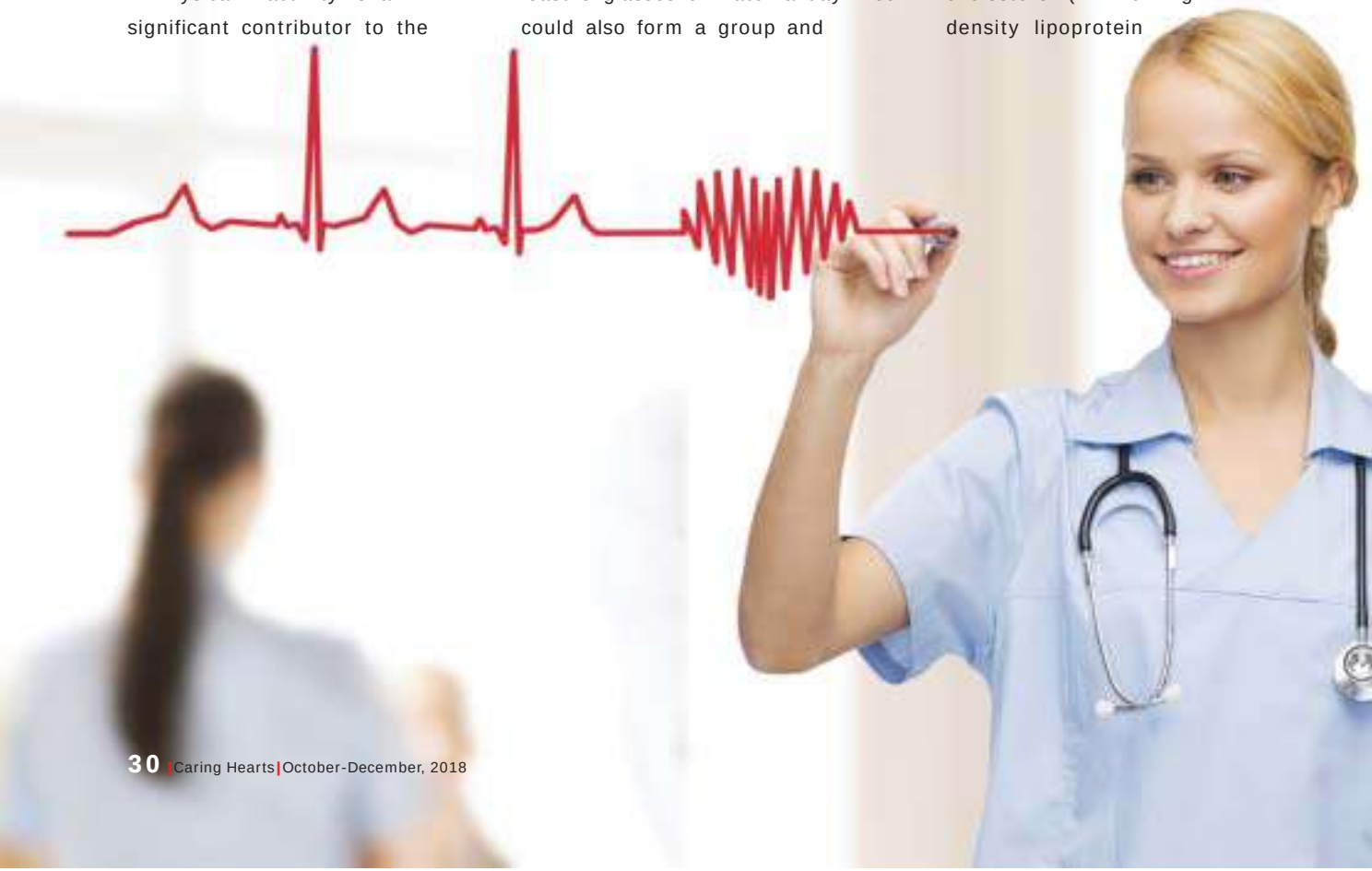
A healthy heart is vital for healthy living, regardless of one's age or gender. One can prevent major cardiovascular risks, like heart attacks and strokes by choosing a healthy diet, being physically active and not smoking, not just home but even at work.

Mantra for a healthy heart:

1. Exercise

Physical inactivity is a significant contributor to the ageing of heart, as it can lead to excess weight gain and obesity, diabetes and hypertension. Bring about little changes at your work place which will go a long way to keep your heart healthy like breaks for a brisk walk, taking the stairs instead of the elevator, a quick walk post lunch, carrying healthy home cooked food to work instead of ordering in, having at least 8 glasses of water a day. You could also form a group and indulge in after-work sport activities. Regular exercise helps in:

- Slow down the narrowing of arteries to the heart and brain
- Encourage the body to use up excess stored fat, so it is crucial in helping weight loss and fighting obesity
- Improve cholesterol levels by increasing the level of good cholesterol (HDL or high density lipoprotein



cholesterol) in the blood

- Maintain normal blood glucose levels in order to manage diabetes
- Reduce high blood pressure
- Smokers to quit - smokers who exercise are twice as successful in their attempts to stop smoking

Being active also improves the overall health, gives more energy, reduces stress, builds stronger bones and muscles, and improves balance, strength and mobility.

2. Eat right

To help maintain a young heart for life, calories consumed must be balanced with calories burned. It is therefore recommended to combine exercise with a balanced diet including plenty of fruits and vegetables, whole grain products, lean meat, fish and pulses, as well as low-fat and fat-free products, unsaturated soft margarines and oils such as sunflower, corn, rape-seed and olive oil.

3. No smoking

Smoking, or any use of tobacco, is another important risk factor of heart disease. Quitting using tobacco lowers blood cholesterol and low-density lipoprotein "LDL" cholesterol (bad cholesterol) levels, reduces blood clotting and the chance of a sudden blockage of an artery. Setting a good example by not using tobacco gives a clear, consistent message about the dangers of tobacco to children.

Your work and workplace environment has a significant impact on our physical, mental and social health. One can prevent major cardiovascular risks, like heart attacks and strokes by choosing a healthy diet, being physically active and not smoking at work and encourage colleagues to do the same

4. Workplace Wellness

Your work and workplace environment has a significant impact on our physical, mental and social health. It has been seen that a number of chronic diseases impact people in their "working" years, reducing productivity and increasing costs. An unhealthy work environment is characterised by stress, depression, chronic back problems, unhealthy eating habits due to lack of time and decreased opportunity for physical activity. A healthy work environment works to:

- improve employee health
- reduce employee stress
- reduce workforce turnover
- improve employee decision-making ability
- reduce organisational conflict
- reduce absenteeism

5. Know The Heart Facts

- Forty per cent patients with heart attacks in India are less than 40 years of age.
- Regular exercise for at least 30 minutes every day, consuming 5 to 6 servings of fruits and green vegetables protect against heart attacks.
- Smoking more than 20 cigarettes per day increase ■■

Follow these Exercise Tips to prevent heart disease

Physical inactivity, is a major risk factor for developing coronary artery disease. It also contributes to other risk factors, including:

- Obesity
- High blood pressure
- A low level of HDL i.e good cholesterol
- Diabetes

Even moderately intense physical activity such as brisk walking is beneficial when done regularly for a total of 30 minutes or longer 3-6 days a week. There are 3 kinds of exercises that can be done. They are:

- Stretching (stay loose)
- Aerobic (for blood flow and oxygen)
- Strengthening (toning or building muscles)

The most important exercise for the heart is aerobic exercises. Walking, jogging, running, swimming, dancing and cycling are aerobic. The decision to carry out a physical fitness programme cannot be taken lightly. It requires a life long commitment of time and effort. Exercise must become one of those things that you do without question, like bathing, brushing your teeth. Unless you are convinced of the benefits of fitness and the risks of unfitness, you will not succeed. How often, how long and how hard and what kinds of exercises you do should be determined by what you are trying to accomplish. For example, an athlete training for high level competition would follow a different programme than a person whose goals are good health and the ability to meet work and recreational needs.

Should you exercise?

The hour just before the evening meal is a popular

time for exercise. Another popular time to work out is early morning, before the work day begins.

What are the benefits of exercise?

- The heart can pump more blood and oxygen to the body.
- Most people will have more energy
- You sleep better and feel less stress
- Blood pressure and blood sugar go down
- You can tone muscles and lose body fat
- Your HDL i.e., good cholesterol goes up

How should you exercise?

Step 1. Get loose, spend 5-10 minutes warming the muscles before you work out harder. Take a walk, jog slowly or cycle with no tension. Then stretch the muscles to loosen them.

Step 2. Hard work for 20 to 30 minutes. Wear comfortable clothes and shoes that match the sport.

Step 3. Cool down like you warmed up. Spend 5-10 minutes walking slowly or cycling with no tension. Then stretch the muscles to keep them loose. Pick up more than one kind of exercise so that you don't get bored, while on exercise machines. You can often watch television or listen to music. This is a good way to keep from getting bored. You may join an exercise group or get a friend to work out with you. Add more daily exercise in these ways:

- Climb stairs rather than taking an elevator
- Park at the far end of parking lot so that you have to walk more
- Do more housework

Recommendation

For most healthy people

For health benefits to the heart, lung and circulation perform any vigorous activity for at least 30-60 minutes, 3-4 days each week at 50-75 per cent at your maximum heart rate. Physical activity need not be strenuous to bring health benefits. Moderate-intensity physical activities for 30 minutes or longer on most days provide some benefits. What is important is to include activity as part or a regular routine. Activities that are especially beneficial when performed regularly include:

- Brisk walking, hiking, stair-climbing, aerobic exercise
- Jogging, running, cycling, rowing and swimming
- Activities such as soccer, basketball that involve continuous running

For people who are sedentary

- Walking for pleasure, gardening and yard work
- Housework, dancing and prescribed house exercise
- Recreational activities

Even a Little Weight Training May Cut the Risk of Heart Attack and Stroke

Despite the muscle-building, flab-trimming and, according to recent research, mood-boosting benefits of lifting weights, such resistance exercise has generally been thought not to contribute much to heart health, as endurance workouts like jogging and cycling do. But a study published in October in the journal Medicine & Science in Sports & Exercise provides evidence for the first time that even a little weight training might reduce the risk of heart attack or stroke. People appear to gain this benefit whether or not they also engage in frequent aerobic exercise.

The study drew from an invaluable cache of health data gathered at the Cooper Clinic in Dallas, where thousands of men and women have been undergoing annual checkups, which include filling out detailed questionnaires about their exercise habits and medical history. More than 12,500 records were anonymized for men and women, most of them middle-aged, who had visited the clinic at least twice between last ten years.

HEART CARE FOUNDATION

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Category Of Membership: ☐ Individual ☐ Institutional ☐ Organization

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☐ I Want to sponsor a poor heart patient and enclose herewith a sum of Rs. 25,000/part thereof; and become a member of the Foundation.

☐ I Want to be a subscriber of the quarterly health magazine **'Caring Hearts'** for 3 years And become a member of the Foundation, by paying Rs. 1250/-

☐ I Support HCF's New Venture ' MY HEART HOUSE' and promise to help on a later stage/Enclosed My Donation

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Receipt No:

Fill this coupon and post with your payment to:

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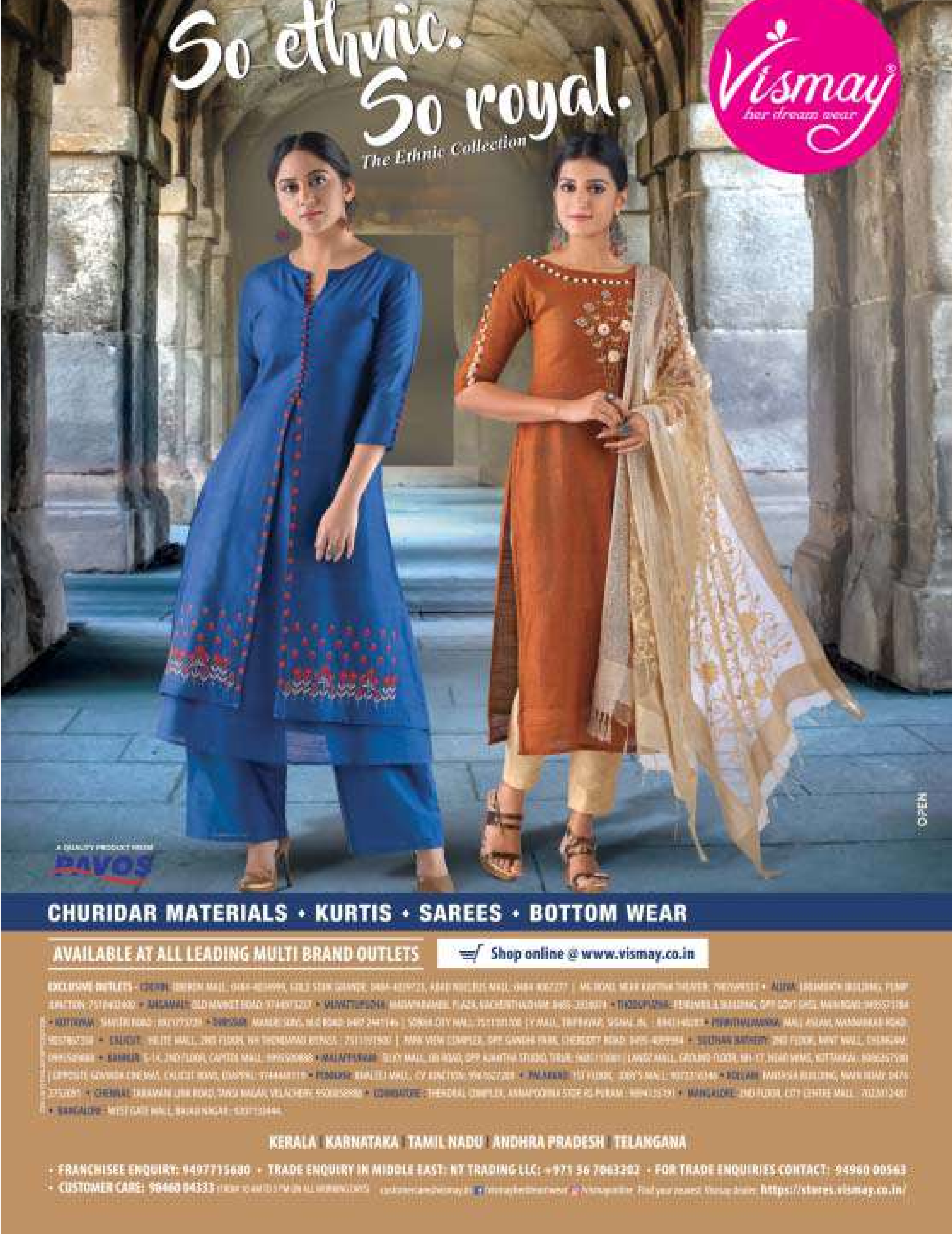
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