

OFFICIAL JOURNAL OF HEART CARE FOUNDATION

January-March, 2019 Vol 08 Issue No. 01



**CARING**

# HEARTS

ALL ABOUT

**CHEST  
PAIN**



**AVT**  
**PREMIUM**  
CTC DUST TEA

*Passed on from  
Generation to Generation*



**The Strongest Tea. Consistently.**



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

# Chairman's MESSAGE

Dear friends in Heart Care foundation,

Since my last message to all the readers of the 'Caring Hearts' a lot of developments have taken place both in your Foundation and in the nation. India the largest democracy of the world has just completed another general election. The country has given the ruling party one more chance with a massive mandate to rule this nation for another five years. We hope and wish that the new government will give high priority to the health sector that would bring about changes to the health of people with emphasis on primary health sector. Generally the health sector is ignored vis a vis other departments which brings in revenue to the government. A healthy nation will only stand to gain with high productivity and with less disease less of expenditure.

At the Foundation we have had a combined meeting of the Advisory board, Governing Council and the Medical Panel. The meeting took stock of the activities carried out currently by the foundation and also suggested a series of programs which could help the general public in the area of heart care. We have initiated a new program called Telemedicine in association with Lisie Heart Institute and with the technical support from MAGICS. Our main objective would be to strengthen the Primary Health Centre (PHC) in detecting early signs of the disease and provide expert opinion. This would apart from strengthening the primary health centers will empower the Medical Officers at these centers to identify and pick up such cases early. The program will in a way revolutionize the health care delivery system in the remote areas of the State.

We have also had another Instrumental flash mob at the main atrium of Lulu shopping mall under the caption 'Pause for my brother' this was well recieved. The annual feature of Hrudayasangamam 2019 was held recently at Lisie hospital auditorium. As in the past the patients and their families came in good numbers and made the programs successful through their interactive session. Dr Remla Beevi A, Director Medical Education was awarded this year's 'Social Excellence Award for her contribution in the field of medical education.

Friends, we would be the entering shortly the 15<sup>th</sup> year of our existence and we have lined up several programs to serve the people in the Heart care sector. We would therefore request your active support and cooperation to implement these projects.

**Dr Jose Chacko Periappuram**

Chairman HCF



## Heart Care Foundation

36/117 A 1, Second floor, Lisle Hospital Road,  
Kottocanal Junction, Kochi- 682018.  
Phone 0484 2406393, Mobile number: 9847006000  
Email: mail@heartcarefoundation.com  
Web: www.heartcarefoundation.com

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Dr. Jacob Abraham

Mr. Raju Kannampuzha  
Mr. Dominic J. Mechery

### Programme Co-Ordinators

Mr.P.Krishna Kumar, Mr. Antony Felix, Mr. Stephan Pascal

### Executive Director

Mr. Dominic J. Mechery

Conceived, Edited & Designed by  
themediafactory1@gmail.com



## Heart Care Foundation

36/117 A 1, Second floor,  
Lisle Hospital Road, Kottocanal Junction,  
Kochi- 682018  
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## CARING HEARTS

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Mr. Dominic J Mechery  
Executive Director

## ED's MESSAGE

*From Executive Director's Desk:*

We are in general poor in documentation and this is reflected in our data on health which can pose serious issues for the future. India's rank in collating and using the data captured on cause of death is dismal when compared to other nations. The data captured by medically certified cause of death (MCCD) recorded in hospitals is only 10% and thus not a representative of the national pattern of mortality by cause. Among BRICS nations Brazil tops the chart with 99% compliance where the cause of death is recorded and India stands last with 10% compliant. This data which are not backed medically cannot be relied/used for any sample survey and therefore has substantial limitations for any study to be conducted based on the data and therefore too low to be useful in monitoring any trends in the national causes of death. Cardiac Vascular disease (CVD) is the first among the major cause of death in India and the data on the cause and the types of heart diseases which is involved in the death is also not well documented. There is no coordinated effort at any level in collating the data and this seriously hamper lack of information on the disease. There is an urgent need for a fully functional C V D Registry for the State. A concerted effort is required in this direction, or else we will be continuing to treat the disease without actually knowing the cause specific to our state.

Caring Hearts the quarterly magazine of Heart Care Foundation has so far come out with 48 issues with useful articles, tips and news from the Foundation. We are attempting a makeover to break the monotony and make it more readable with a fresh, bold & classic look. We are adding some new features and also repeating some old articles which have appeared long time back to have nostalgia. Do tell us what do you think of this new look with new ideas. We'd love to hear from you.

**Dominic J. Mechery,**  
Executive Director

# Is this chest pain from

# HEART BURN or a HEART ATTACK?

Chest pain can be a sign that a person is having a heart attack. However, chest pain is also a common symptom of other, less serious conditions, such as gastroesophageal reflux disease.

Doctors refer to pain from heart attacks and other conditions that affect the cardiovascular system as cardiac chest pain. Pain that does not come from the cardiovascular system is called noncardiac chest pain.

Gastroesophageal reflux disease (GERD) can cause heartburn, which is a common type of noncardiac chest pain.

While heart attacks are a life-threatening medical emergency, heartburn is not. Therefore, being able to recognize the difference between cardiac and noncardiac chest pain is essential.

In this article, we discuss the symptoms of GERD and heart attacks along with the differences between cardiac and noncardiac chest pain. We also cover other causes of both types of chest pain.



## Is it GERD?

*Many conditions can cause chest pain, including acid reflux.*

Acid reflux occurs when acid from the stomach leaks up into the food pipe, or esophagus. One of the most common symptoms of acid reflux is heartburn, which is a painful burning sensation in the center of the chest just behind the breastbone, or sternum.

According to the National Institute of Diabetes and Digestive and Kidney Diseases, a person who experiences acid reflux more than twice a week for a few weeks may have GERD. Other symptoms of acid reflux and GERD can include:

- a sour or bad taste in the mouth
- bad breath
- tooth decay
- difficulty swallowing
- nausea and vomiting
- a hoarse voice

People with persistent symptoms of acid reflux or GERD should see a doctor.

Is it a heart attack?

Heart attacks occur when the blood supply to the heart muscles becomes completely blocked. If a person does not receive immediate treatment, part of the heart muscle can die.

A common symptom of a heart attack is pain or discomfort that typically

**While heart attacks are a life-threatening medical emergency, heartburn is not**

occurs in the center or left side of the chest. This pain may come and go, and its severity can range from mild to severe. It can also sometimes feel like heartburn or indigestion.

However, not everyone who has a heart attack experiences chest pain. The symptoms of a heart attack can vary considerably from person to person, and they may come on slowly or very suddenly.

Other symptoms of a heart attack might include:

- intense pressure or tightness in the center of the chest
- a feeling of heaviness or weakness in one or both arms

When trying to distinguish between cardiac and noncardiac chest pain, a person needs to consider the following three factors:

- the location of the pain
- how the pain feels
- the accompanying symptoms

We discuss each of these in more detail below:

#### Location of chest pain

Both cardiac and noncardiac chest pain can occur in the center of the chest behind the breastbone.

However, cardiac chest pain can spread across the chest and even affect other parts of the body, such as the:

- arms
- back
- shoulders
- neck or throat
- jaw
- teeth
- pain, numbness, or a tingling sensation in the arms, neck, jaw, lips, or stomach
- difficulty breathing or shortness of breath
- nausea and vomiting
- dizziness or light headedness
- fatigue

Cardiac vs. noncardiac chest pain

*A person experiencing recurring or severe chest pain should speak to a doctor.*

Noncardiac chest pain, such as heartburn, tends to remain localized, meaning that it does not spread to other areas. Heartburn typically develops behind or underneath the breastbone.

#### How the pain feels

Some of the words that people use to describe cardiac chest pain are:

- pressure
- squeezing
- heaviness
- fullness
- tightening
- aching
- burning

In contrast, noncardiac chest pain tends to feel like an intense stabbing or burning sensation just beneath the surface of the skin. Coughing, breathing, or moving can affect the intensity of noncardiac chest pain, while the severity of cardiac chest pain usually remains stable, even when resting.

#### Accompanying symptoms

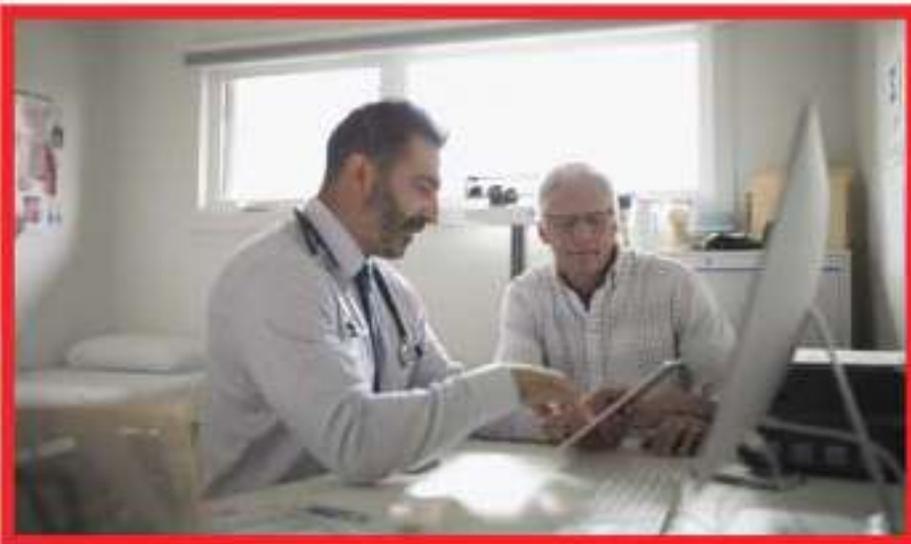
The symptoms accompanying chest pain can be an important indication of whether it is cardiac or noncardiac.

The symptoms that can occur along with cardiac chest pain may include:

- shortness of breath
- irregular heartbeat
- dizziness or lightheadedness
- numbness
- pain or discomfort in other parts of the body, such as the arms, neck, jaw, shoulders, and back

Symptoms that indicate that the chest pain is from heartburn or GERD can include:

- pain or difficulty swallowing
- bloating
- belching or hiccups
- bad breath
- a sore or irritated throat
- an unpleasant or sour taste in the mouth



## Heart info

Other causes of cardiac chest pain

Causes of cardiac chest pain can include:

### Angina

Coronary artery disease (CAD), also called ischemic heart disease or coronary heart disease, occurs when fatty deposits build up in the arteries that supply blood to the heart muscle.

Over time, these deposits can restrict blood flow, which can cause a type of chest pain called angina. CAD can also lead to heart attacks and heart failure.

People often describe angina as a feeling of pressure, squeezing, burning, or tightness behind the breastbone. This pain can spread to other parts of the body, including the arms, jaw, neck, and shoulders.

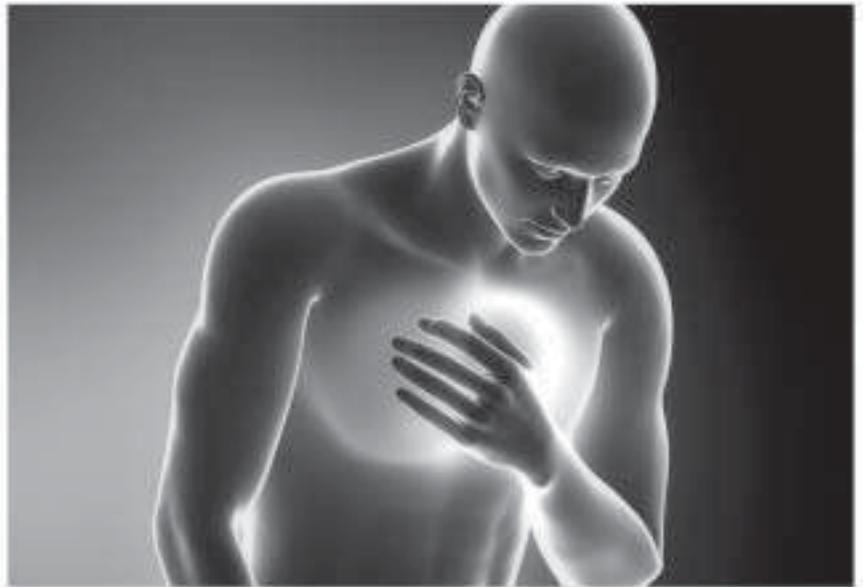
Angina often occurs during physical activity, and stress can also bring it on. If the pain continues after rest, this can be a sign of a heart attack.

### Myocarditis

Myocarditis is a rare form of cardiovascular disease that causes inflammation of the heart muscle. This inflammation can lead to chest pain, heart failure, or sudden death.

Myocarditis produces symptoms similar to those of other heart

**People can inherit genes from their parents that increase their risk of developing HCM**



conditions, such as chest tightness and fatigue. Leaning forward can help relieve chest pain resulting from myocarditis.

Other symptoms of myocarditis include:

- slow heart rate
- irregular heartbeat
- dizziness or lightheadedness
- loss of consciousness

### Hypertrophic cardiomyopathy

Hypertrophic cardiomyopathy (HCM) is a thickening of the muscle wall in the heart.

People can inherit genes from their parents that increase their risk of developing HCM. However, HCM can also occur as a result of high blood pressure, diabetes, or thyroid disease.

The symptoms of HCM include:

- chest pain that often results from exercise
- shortness of breath
- fainting
- fluttering heartbeat or heart palpitations

### Pulmonary hypertension

Pulmonary hypertension refers to high blood pressure in the arteries that supply the lungs.

Common symptoms include shortness of breath and chest pain, which may occur or worsen with physical activity. Over time, symptoms may become more frequent as the disease progresses.

People with pulmonary hypertension may also experience:

- fatigue and weakness
- fainting, lightheadedness, or dizziness
- irregular heartbeat
- a dry cough that may bring up blood
- swelling of the legs or feet that results from fluid buildup

Other causes of noncardiac chest pain

Causes of noncardiac chest pain can include:

### Pneumonia

*Pneumonia can cause shortness of breath and chest pain.*

Pneumonia is a chest infection that causes the tiny air sacs inside the

lungs to become inflamed and fill with fluid.

A common symptom of pneumonia is chest pain that typically worsens when a person inhales deeply or coughs. The chest pain can range from mild to severe.

Other symptoms of pneumonia can include:

- difficulty breathing
- shortness of breath
- coughing that produces green or bloody mucus
- fever
- chills
- fatigue
- loss of appetite

### **Peptic ulcer**

A peptic ulcer is an open sore in the lining of the stomach or small intestine. Bacterial infections and long-term use of nonsteroidal anti-inflammatory drugs can lead to peptic ulcers.

Peptic ulcers can cause a painful burning sensation that starts in the abdomen and extends to the chest. This pain can come and go and may get better when a person eats or takes an antacid.

Other symptoms of peptic ulcers can include:

- bloating
- belching
- nausea and vomiting
- dark stools
- unexplained weight loss
- loss of appetite
- lightheadedness

However, not everyone with peptic ulcers experiences symptoms.

### **Costochondritis**

Costochondritis is an inflammation of the cartilage around the breastbone.

This inflammation can cause tenderness and sharp chest pain that may feel similar to the pain of a heart attack.

The pain from costochondritis usually affects the left side of the chest, but it can sometimes affect both sides. Deep breathing, coughing, and physical activity may make the pain worse.

Possible causes of costochondritis include severe coughing, chest injuries, infections, and overexertion.

### **Esophageal spasms**

Involuntary spasms or contractions of the food pipe can cause intense chest pain. These spasms can come on suddenly and sometimes last for several hours.

Other symptoms of esophageal spasms may include:

- intense pain or tightness in the chest
- feeling as though something has become stuck in the throat
- stomach contents coming up the food pipe
- difficulty swallowing

It is not always clear why esophageal spasms occur, but risk factors include GERD, anxiety, and high blood pressure.

### **Panic attack**

A panic attack refers to a sudden attack of intense anxiety and fear.

These attacks can last for between a few minutes and several hours, and a person may feel as though they are having a heart attack.

Symptoms of a panic attack can include:

- chest pain
- pounding, rapid, or irregular heartbeat
- trembling or shaking
- shortness of breath
- a sensation of choking or suffocating
- nausea
- dizziness or lightheadedness
- numbness
- sweating
- feelings of doom, loss of control, or unreality

A person may have a panic attack in response to a stressful event, but an attack can also occur unexpectedly. Recurrent panic attacks are a symptom of panic disorder.

### **Summary**

Heartburn is a symptom of acid reflux and GERD that causes a painful burning sensation in the center of the chest. This sensation can sometimes feel similar to the chest pain that people experience during a heart attack or attacks of angina.

A heart attack is a medical emergency, so being able to tell the difference between heartburn and cardiac chest pain is crucial. If chest pain spreads to other areas of the body, such as the arms or jaw, or occurs alongside symptoms such as shortness of breath and a feeling of tightness in the chest, it might be a sign of a heart attack. If chest pain lasts for more than a few minutes, call help immediately.

A person who suspects that they or someone else is having a heart attack should go straight to the emergency room. It is also advisable to see a doctor about any unexplained chest pain, even if it goes away on its own. ■■

# Before meeting your Cardiologist...

## Dr. Shifas Babu M.

MD, DM, DNB, MNAMS, FACC

Consultant interventional Cardiologist  
Ananthapuri Hospital and GG hospital,  
Thiruvananthapuram.

**A**dvances in medical sciences are blooming rapidly like in other fields. Situations in yesteryears are

reason for head ache and not all abdominal pain is gas or indigestion!! Nowadays inappropriate selection of specialist by the patient himself is a common occurrence. This could potentially lead to delays in diagnosis and treatment and occasionally therapy that is unwarranted. It is important to be

treating and preventing diseases of the heart and blood vessels. A qualified Cardiologist in India will have completed his under graduation (MBBS), postgraduation (MD/DNB/ equivalent degree in internal medicine) and postdoctoral degree (DM/DNB/ equivalent in Cardiology). This requires more than 10 years of training. Similarly a Cardiac surgeon will have trained after MBBS in General surgery followed by Cardiothoracic surgery.

### When to meet a cardiologist?

You may have to consult a Cardiologist primarily when you have heart related symptoms. These include chest pain, breathlessness, palpitations, swelling of feet, syncope (sudden and transient loss of consciousness), leg pain while walking etc. Sometimes you may be referred by specialists in other fields or your family physician to assess cardiac function; to rule out cardiac involvement in other disease states; as part of preoperative work up; or pre-treatment fitness assessment for a procedure. Sometimes it may be for evaluation of abnormal heart sounds (murmurs) that are incidentally picked up. Occasionally, your doctor or you could seek a second or third opinion for a pre-existent problem.

incomparable to the current scenario. Around 4 decades ago, all we needed to do was to visit a family doctor for any malady and he would treat us. Today, we have specialists and super specialists. The human body is such that many symptoms may have overlapping implications. For example, heart is not the only reason for chest pain; brain is not the only

### Who is a cardiologist?

A cardiologist is a doctor with special training and skill in finding,

aware of all your concerns first. Meeting a family doctor or a general medicine consultant; to whom you can express all your health concerns may be the next step to a correct evaluation and timely referral to the appropriate specialist.



The most important facet in any consultation and treatment is the rapport and trust between the doctor and you. In a busy out-patient service, the time available for a meaningful interaction and evaluation may be limited. In order to maximize the benefit of this interaction between you and your Cardiologist, it is best to come prepared.

*These are few tips that can optimise the consultation:*

#### **Assemble a personal health history-**

This is the most important thing when you consult your doctor. Most of the diagnosis comes from what you tell the doctor, and a directed clinical examination. Investigations usually have a supportive role. Your symptoms themselves may be significant enough to warrant treatment even without changes in ECG or ECHO. On the contrary, some changes in ECG/Echo/ other investigations may be not be considered significant if history and clinical examination do not correlate with the test results. For the same reason, trying to “test” the doctor’s ability to find out a disease may be counterproductive to your own health. Always remember, clinical examination findings and test results have value only when it correlates with patient’s clinical situation or symptoms. Try to express in as much relevant detail as possible, your symptoms or difficulties. Compiling a list of your past health history is also very important. These include any surgical procedures (with at least approximate dates), a list of any major prior or ongoing illnesses/health issues, and a list of any major tests, even if not related to Cardiology. Knowing past

health events can help the physician make a diagnosis or prescribe or modify the best course of treatment. It is often helpful to note down about symptoms you have been experiencing.

**Compile a family health history of close relatives.** Many diseases run in the family and have a genetic background. A family history of health events can provide clues as to what illnesses/conditions you may

carry your old as well as recent test reports. Change in test results (for example Blood sugar, cholesterol, sodium, potassium levels and kidney function, etc.) are important in diagnosing a disease, in assessing the progression or improvement of a disease and also in modifying treatment. Certain investigations like lipid profile, blood sugar, HbA1C, RFT and electrolytes, PT INR etc are regularly monitored in

**Always remember, clinical examination findings and test results have value only when it correlates with patient’s clinical situation or symptoms. Try to express in as much relevant detail as possible, your symptoms or difficulties**



be at risk of developing. From a Cardiology perspective, what you are especially interested in finding out is whether any of your relatives have been diagnosed with heart disease, high blood pressure, high cholesterol, diabetes, or aneurysm. This is most important when your first degree relatives (father, mother, brother or sister) have these issues diagnosed at younger age. Details about the cause of death or any unexpected sudden death in a relative is also important.

**Recent and old test results-** Always

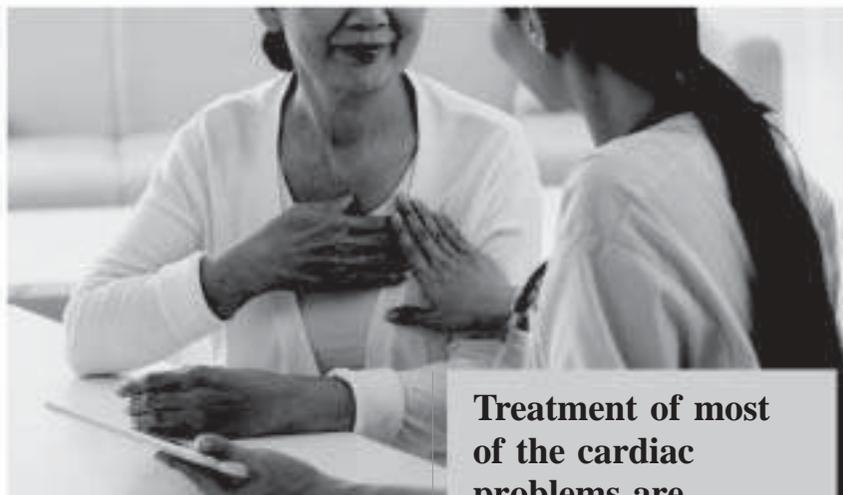
cardiac patients. Bringing these test results on follow up visits is always useful. For the same reason, be aware of what tests are to be done before the next review visits.

ECGs are mostly traced onto heat-sensitive paper, and therefore fade away after a while. It is a good idea to keep a photocopy of old ECGs in your file or a photo of your ECG in your smart phone. Certain ECG changes may persist after a heart problem. So it is important to see whether the change in current ECG is pre-existing or new. This vital

information can be derived only if you have the old ECG. Crucial decisions for admission or observation may be based on this small new “change” in ECG. Other important documents worth carrying when you meet a cardiologist are previous echocardiogram, angiogram, angioplasty or bypass surgery reports. If a CD is available always take it with you. Details of pumping function (EF), blocks or graft details are crucial in modification and decision making after consultation. Having test reports will help to avoid duplicating tests unnecessarily.

Sometimes, you may wonder why the doctor has ordered a test repeatedly, in the same visit itself. For example, if you complain about chest pain doctor may ask for an ECG and troponin test. If initial reports are normal he may ask for repeat test after few hours depending on the symptom and clinical scenario. ECG changes may be dynamic and transient. Troponin may change from negative to positive within a few hours. Interpreting these results helps your doctor to make decisions on sending you home safely.

**Always bring a list of your current medications.** Your current prescription including name, dose, and frequency of use is an important document for your Cardiologist. If you can carry the tablets with you it will be more useful because same drug may have multiple brand names and no doctor can remember all the available brand names. A list of any medication allergies or side effects is also helpful. Some drugs might have been changed by your previous



**Treatment of most of the cardiac problems are lifelong. And many medications are for primary or secondary prevention of heart problems and to be continued even if you donot have any symptoms**

doctor due to an adverse effects (for example certain drugs for hypertension can produce feet swelling, some can produce low sodium level, some drugs might have resulted in bleeding etc.). These details will help the doctor to give a patient friendly prescription.

**Compile a list of all the doctors** you are following up if possible, including their names, addresses, telephone numbers, and condition being followed. This will help your Cardiologist and all of your other care providers to discuss your details for a coordinated treatment.

If you are a heart patient who is on long term follow up and regular medications; it is better to carry your details in a folder. Arrange the details and test reports in a chronological order- with the latest on the top.

Treatment of most of the cardiac problems are lifelong. And many medications are for primary or secondary prevention of heart problems and to be continued even if you donot have any symptoms. Doses of the drugs may change in

each visit according to the clinical scenario. So, you may need regular follow up and regular investigations.

Many advices for health promotion given to the general population may not be applicable to Cardiac patients (for example- dietary and fluid intake practices). If you are a Heart patient, following your Cardiologist's suggestions would benefit you. Note down your doubts that need to be clarified, however “simple” they may seem, when you visit your doctor.

Hope these suggestions will help you be prepared for a fruitful and efficient interaction with not just your Cardiologist, but any specialist. Stay healthy, stay blessed!



**T**elemedicine program, of which the trials were done successfully, is implemented formally from Friday April 12, 2019.

The program is a joint venture of Lisie Hospital & Heart Care Foundation with the technical support of MAGICS. Once implemented, this will act as a tool to reach out to the underprivileged people in remote locations of Kerala.

Heart disease is the number one disease in terms of mortality in our State followed by Cancer, and this is bound to increase manifolds in view of the exponential growth of non-communicable diseases like hypertension and diabetes. In fact a study conducted by ICMR sometime back rated Kerala No: 1 along with 2 other states in most number of C V D cases.

Our main objective would be to strengthen the Primary Health Centre (PHC) in detecting early signs of the disease and provide expert opinion. This would apart from strengthening the primary health centers will empower the Medical Officers at

# TELEMEDICINE

## *A brief note*

these centers to identify and pick up such cases early in the future.

The program will in a way revolutionize the health care delivery system in the remote areas of the State. The program envisages patients coming to the PHC to discuss their problem along with the M O to a Cardiologist at Lisie Hospital through telemedicine and there by get an expert opinion. This would otherwise end up with PHC level and the patient as in most cases economically weak would not bother to take up the case to the next level and have to suffer for life. We are actually targeting that group of people

who are in remote areas who cannot reach a District/ Taluk hospital for want of finance and support. Apart from the expert opinion we also can help with follow up cases were otherwise they have to go back travelling long distances and wait in long queues. This would therefore improve the compliance level and thereby the adherence to treatment protocol. As it progress we can add on new tools to get better or accurate diagnosis. This is a beginning and we are going to learn a lot but the advantages of the program will be there for all to see.

**Lisie Hospital & Heart Care Foundation with the technical support of MAGICS. Once implemented, this will act as a tool to reach out to the underprivileged people in remote locations of Kerala**



His Eminence Mar George Cardinal Alencherry inaugurating Hrudayasangamam 2019. (From left) Mr. Raju Kannampuzha, Dr. Ronny Mathew Kadavil, Dr. Jose Chacko Periappuram, Dr. Remla Beevi A, Fr. Thomas Vaikathuparambil, Dr. Junaid Rahman, Dr. Jacob Abraham, Mr. Binu Jose are also seen

# Hrudaya Sangamam 2019



His Eminence  
Mar George Cardinal Alencherry



Dr. Jose Chacko Periappuram  
Chairman, Heart Care Foundation



Acceptance speech by  
Dr. Remla Beevi A, Director,  
Medical Education,

**H**rudayasangamam a unique event of Heart Care Foundation were the patients' undergone coronary Bypass Surgery/other procedures have an opportunity to interact with doctors, dietician and

other paramedical staff along with their families. This year's Hrudayasangamam was held on Sunday May 19, 2019 at Lisie Hospital Auditorium, beginning at 10.00 am. After the registration at the designated counter the patients along

with their families assembled at the auditorium.

The proceedings of the first session began with the Welcome/Introduction address by Dr. Jose Chacko Periappuram, Chairman, Heart Care Foundation. This was followed by a



*His Eminence Mar George Cardinal Alencherry presenting Social Excellence Award 2019 to Dr. Remla Beevi A.*



*His Eminence Mar George Cardinal Alencherry presenting Gold Medllion to Dr. Remla Beevi A.*

detailed presentation by Dr. Jo Joseph, Trustee, Heart Care Foundation on 'Heart disease-how to live with it'. After the lively presentation by Dr. Jo, Dr. Nisha, Dietician and Professor of nutrition St. Therasas College & Governing Council member spoke on 'Healthy eating'. At this point it was time for the official function of Hrudayasangamam 2019 to commence. The Chief Guest, the Awardee of Social Excellence Award of the foundation along with other guests and council members were welcomed and seated in the places allotted to them.

The official function commenced with formal welcome address by Dr. Jose Chacko Periyapuram, Chairman. Moving away from the customary style the Chief Guest and the guests of honor were presented with books instead of floral bouquets. This was followed by the presidential address by Fr. Thomas Vaikathuparambil

*(Continued... page 18)*



*Fr. Thomas Vaikathuparambil*



*Dr. Ronny Mathew Kadavil*



*Dr. Jacob Abraham*



*Dr. Junaid Rahman*



*Mr. Binu Jose*



*Mr. Raju Kannampuzha*

## Heart info

# What to do in the event of a heart attack

Learning to recognize warning signs and risk factors can help people avoid a heart attack. When a person has a heart attack, knowing what to do and acting quickly can help them have a better outcome.

**A heart attack occurs when there is a blockage of blood flow to the heart. When a blockage to blood flow occurs, it can damage or even kill parts of the heart tissue.**

**While the movies may depict heart attacks as happening suddenly, many heart attacks begin slowly and have many warning signs.**

## Signs and symptoms



*A heart attack may cause pain in both shoulders and arms.*

The main heart attack symptoms include the following:

- **Chest pain or discomfort:** The chest pain or discomfort may feel like pressure, tightness, or a squeezing sensation.
- **Shortness of breath:** This may occur with or without chest pain.
- **Discomfort in other parts of the body:** The back, both arms and shoulders, neck, or jaw may also be uncomfortable during a heart attack.

While both males and females may experience the primary heart attack signs and symptoms, the symptoms we have listed above are more common in males.

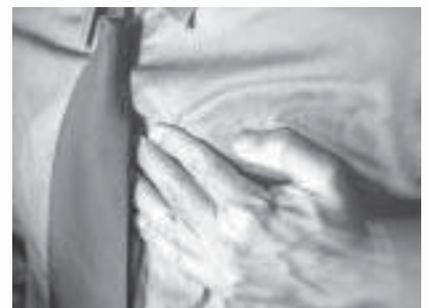
Females are more likely to experience additional signs and symptoms. These include:

- nausea and upset stomach
- abdominal pain
- cold sweat
- lightheadedness
- sudden dizziness
- fatigue

## What to do

A heart attack is a life-threatening medical emergency. If someone may be having a heart attack, a person should immediately call for emergency help before doing anything else. Acting quickly can help save someone's life. If the individual having the heart attack is unconscious, someone with cardiopulmonary resuscitation (CPR) training should begin CPR.

If a defibrillator is available and someone knows how to use it, they should use the defibrillator after performing CPR if necessary.





## Causes and risk factors

A person should be aware of their risk factors so they can take steps to prevent a heart attack.

There are some heart attack risk factors that people can influence and others that they cannot.

Heart attack risk factors that people cannot influence include:

• **Age:** While heart disease affects people of all ages, according to the American Heart Association (AHA) the most of those who die from coronary heart disease are adults over 65 years of age.

• **Sex:** Males are more likely than females to have and die of a heart attack.

• **Family history:** People with a significant family history of heart disease are more likely to experience a heart attack.

• **Race and ethnicity:** Some ethnic groups, including African Americans, some Asians, and Mexican Americans, are more likely to have a heart attack than others.

While people cannot influence the above risk factors, there are many risk factors that they can modify or treat to prevent a heart attack.

Modifiable risk factors for heart disease and heart attack include:

- obesity
- high blood pressure
- high cholesterol
- diabetes
- unhealthful diet high in saturated fats and sodium
- tobacco use
- excess alcohol consumption
- not getting enough exercise

## Prevention

The best way to prevent a heart attack is to reduce any risk factors.

People can reduce their chances of a heart attack by:

- losing weight if they are obese or overweight
- treating high blood pressure and high cholesterol by consulting a doctor
- controlling diabetes through diet, medication, and managing blood sugar
- eating a diet rich in fresh

vegetables and fruits and low in saturated fats and processed foods

- stopping smoking or using tobacco products
- limiting alcohol consumption to no more than two drinks a day for men or one per day for women
- getting at least 150 minutes of moderate physical activity per week

Additionally, a person should have regular checkups with their doctor.

Regular checkups can help identify new risk factors for heart disease that a person may develop and monitor any existing ones they have.

### Summary

Heart attacks are life-threatening medical emergencies that require immediate medical help. Knowing the signs and symptoms of a heart attack can help a person get the help they need as early as possible. Reducing risk factors for heart disease can help a person prevent a heart attack.



Panelists: Dr. Jeevesh John, Dr. Jo Joseph, Dr. Nisha Vincent, Mr. Felvin Mathew, Dr. Abdul Khader (Panel Chairman)

(from... page 15)

Director, Lisie Hospital. In his address he was very appreciative of the work done by Dr. Jose Chacko and his colleagues along with the Heart Care Foundation in looking after the needs of poor heart patients. After the presidential address His Eminence Mar George Cardinal Alancherry delivered the inaugural speech, in his inaugural address he touched upon the services provided by doctors and paramedical staff in the field of cardiology. While he urged the doctors to continue their noble and selfless service, he requested the persons working in this field not to

fall for commercialization. Cardinal also congratulated the Awardee and appreciated the contribution made by her in the field of medical education. Subsequently, Dr. Jacob Abraham Trustee Heart Care Foundation introduced the Awardee of the Social Excellence Award instituted in the name of Mr. C V Shanmugan Founder Trustee of the Foundation. In his brief introduction of the Awardee Dr. Jacob listed the major achievements of Dr. Remla Beevi A, Director, Medical Education who has been chosen for the award this year. After the introduction His Eminence Mar George Cardinal Alancherry presented the awardee with the gold Medallion. Dr. Jose

Chacko then read the citation to be awarded to the awardee and His Eminence presented the citation to Dr. Remla Beevi. After receiving the Social Excellence award consisting of gold medallion and the citation Dr. Remla Beevi delivered her acceptance speech. In her speech she took the audience through some of her major achievements during her official careers spanning 35 long years. She also touched upon the hurdles she had to face while implementing some of the major projects. She took time to thank the almighty and her family in supporting her all through her career. She also thanked Heart Care Foundation for nominating her for the Social Excellence Award 2019. This was





*Interaction with panellists. A view of audience*

followed by felicitation by Dr. Junaid Rehman, P resident, Indian Medical Association (IMA) and by Mr. Binu Jose Head-Enterprise Business of Vodafone idea Kerala Circle. Mr.Raju Kannampuzha, Secretary, Heart Care Foundation proposed the vote of thanks.The official function thus came to a close.

Thereafter the panel discussion for interaction with patients and families members commenced. Dr. Abdul Khader Cardiologist, Amala Hospital, Thrissur was the Chairman of the panel; other panelists were Dr. Jo Joseph, Dr. Jeevesh John, Dr.Nisha Vincent and Mr. Felvin

Mathew. The panel discussion was very lively with audience competing with each other for asking questions and getting their queries answered. Finally the discussion came to a close at 1.30 pm, with Mr. Dominic J Mechery, Executive Director-Heart Care Foundation presenting mementos to all panelists. This was followed by Snehavirunnu and with this curtains came down to Hrudayasangamam 2019. ■



*Mr. Dominic J Mechery, Executive Director-Heart Care Foundation presenting memento.*

*His Eminence Mar George Cardinal Alencherry inaugural speech. An another view*



# Know your TEAM

## Dr .Jose Chacko Periapuram



After his schooling at South Parur, he did his college education at St. Thomas College, Pala where he secured First rank in BSc Botany from the University of Kerala.

Subsequently he joined for medicine at the Kottayam Medical College. Dr. Jose had his general surgical training at the Royal College of surgeons of Ireland followed by higher cardiac surgical training at the University hospital of Wales, Cardiff and Manchester Royal Infirmary. He secured FRCS from Royal colleges of Glasgow and Edinburgh, he is among the first to obtain FRCS in Cardiac Surgery in 1994. After his training at England he came back to Kerala and setup the first heart surgery division in mid Kerala at the Medical Trust Hospital Kochi. He has conducted and part of more than 20000 heart surgeries and trained a large number of young surgeons to reach consultant level. In 2003 he created a landmark history by conducting the first ever heart transplantation in Kerala making the state the third state in India has to this achievement. Taking into consideration his exemplary work in the field of Cardio Thoracic surgery he was conferred with the prestigious Padma Shri Award by the Government of India in 2011. He is the founder Trustee and the Chairman of the foundation. Dr Jose Chacko is currently the head of the Department of Cardiac Surgery, Lisie Hospital, Ernakulam.

## Mr. K. K. Chacko



Mr. Chacko is a conveyancing lawyer based in Cochin. Did his Bache. lor of law ( LLB) degree from Indian law society ( ILS) law college Pune. He was part of the team of four, selected by the University Grants Commission

(UGC) to prepare a book "A bibliography on Legal Aid in India " which was published in 1987. Additionally he along with his wife Nita runs a Bed and Breakfast unit known as The Westface Cochin at Thevara. A Founder trustee has been of great support.

## Mr.E P George

He hails from the cultural capital of Kerala Thrissur and has successfully established in the field of textile industry. He is a Post graduate in Business Administration. As the Managing Director Novelty Clothing Pvt. Ltd he has created a brand name in women's wear called VISMAY. The Central Board of Direct



Taxes, (CBDT) New Delhi awarded Rashtriya Saman for being the highest tax payer for the years 1995-96 to 1999-2000. Mr. George is associated with various trade bodies in Kochi and has held important positions. He is the president of Kalabhavan Educational Trust (an educational Institution) and also the Chairman of Kalabhavan Studios Ltd. He is a founder Trustee and a very active member of the Foundation.

## Dr. Jacob Abraham



Dr. Jacob had his MBBS at Calicut Medical College and MD at JJM Medical College. Subsequently he did his Fellowship in Cardiac Anesthesia from the Institute of Cardio Vascular Diseases, Chennai. Thereafter joined Medical Trust Hospital and worked there until he joined Lisie Hospital in 2008. Dr. Jacob was the past President and Secretary of Indian Society of Anesthesiology, Cochin Branch and Executive member of National Cardiac Anesthesia Society. Dr. Jacob is an active member of the Foundation and a Trustee. Dr. Jacob Abraham is currently the head of Cardiac Anaesthesia Lisie Hospital, Ernakulam.

## Dr. Jo Joseph



Dr. Jo after his MBBS at Kottayam Medical College pursued his MD at SCB Medical College, Cuttack, Orissa and did his super specialization DM at AIIMS, New Delhi. After his brief stint in various hospitals, he joined Lisie Hospital in 2012 as Consultant Cardiologist. Dr. Jo published several papers to his credit and has presented the same in various professional forums. Apart from being active in professional bodies like Cochin Cardiac Forum, Indian National Society for Heart and lung transplantation and CAD internal conference he was also very active in conducting various conferences. Dr. Jo also had opportunities in presenting professional papers abroad on invitation. Dr. Jo is a Trustee of the Heart Care Foundation since 2018 and has been very active since then. He is instrumental in the makeover of the quarterly magazine 'Caring Hearts' of the Heart Care Foundation.

## Mr. Raju Kannampuzha

After his schooling at Rajagiri he pursued his college education at St. Paul's college Kalamassery, UC College Aluva and Madurai Kamaraj University. He holds double master's degree in Malayalam literature and journalism. After his initial career in teaching he turned into event management and has created a niche for himself. His firm Executive Events is the most sought after conference specialist in the field of healthcare. Apart from his presence in Kerala he has also presence in various countries across the world. Executive Events is the first ISO 9001:2008 event management company in Kerala. Mr. Raju is a very active member of the Foundation, a founder trustee and currently the Secretary of the Foundation.



# Quitting smoking Challenges & Solutions



**T**obacco cause 60 lakh deaths an year worldwide and 10 lakh deaths an year in India alone . It is estimated that if current smoking patterns continue, there will be more than one billion deaths attributable to tobacco smoking in the 21st Century .

Tobacco smoke contains more than 7000 chemicals, of which at least 250 are known to be harmful and at least 69 are known to cause cancer. Here are some of the chemicals contained in tobacco smoke:



Tobacco affects almost all the organs in the body. Smoking is currently the largest preventable cause of cancer-related deaths, accounting for approximately 30% of cancer related deaths. What is really surprising is that smoking causes even more deaths from heart disease , stroke and lung disease than from cancer.

Second hand smoke exposure or passive smoking also is dangerous and puts family members including children at an increased risk for many diseases.

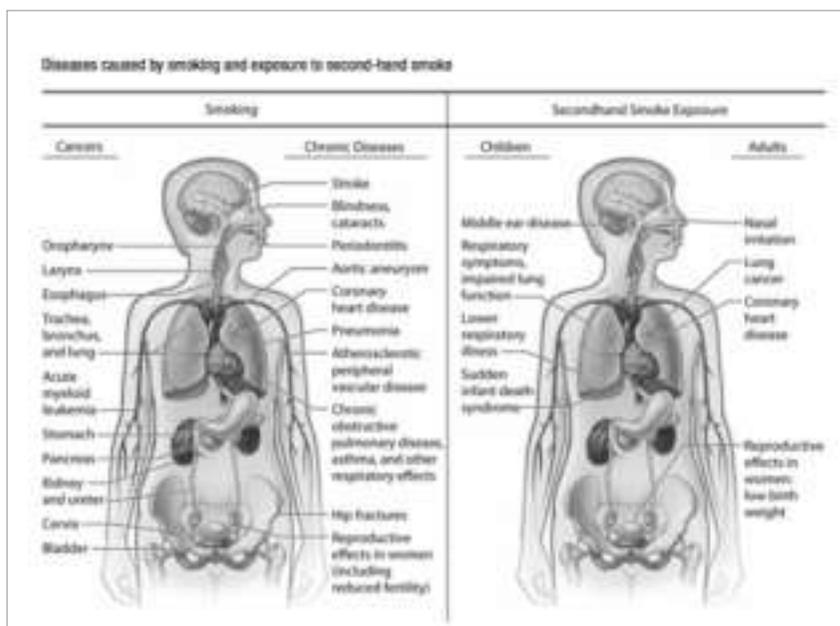
### Why do people get addicted to smoking? The biology of nicotine addiction :

It is interesting to see why more and more people get addicted to smoking in spite of increasing awareness on the ill effects of smoking

Nicotine in cigarette smoke reaches the brain in approximately 7-10 seconds. Nicotine stimulates the release of many chemicals in the brain called neurotransmitters . Dopamine , norepinephrine, Acetylcholine and serotonin are a few of these neurotransmitters causing the pleasurable feelings and improved attention associated with cigarette smoking. These effects play a large role in maintaining smoking behaviour in the addicted smoker. The immediate effects of nicotine dissipate quickly, along with the associated feelings of reward; this rapid cycle causes the smoker to continue smoking to maintain the drug's pleasurable effects

### Nicotine Withdrawal

Withdrawal occurs as a result of dependence, when the body becomes used to having the drug in the system. Being without nicotine for too long can cause a regular user to experience



irritability, craving, depression, anxiety, cognitive and attention deficits and sleep disturbances . These withdrawal symptoms may begin within a few hours after the last cigarette, quickly driving people back to tobacco use. When a person quits smoking, withdrawal symptoms peak within the first few days and usually subside within a few weeks, but for

some, symptoms may persist for months.

### Is it too late to quit?

It is never too late for quitting . Quitting will help you minimise the ill effects of smoking . Quitting now, or making efforts to quit, will greatly decrease your chances of these long term health risks

## How to quit smoking?

Quitting smoking is easy for some ... They just decide to quit and their body obeys the mind ..and they succeed in maintaining their distance from cigarette easily. But most are not this strong or lucky, and need help for quitting.

### How to improve your confidence in quitting?

Many smokers are afraid to quit because they have tried to quit in the past and were unsuccessful. They think it will be too hard because they don't believe they can overcome withdrawal symptoms, they feel like they have no support, or just don't think they are capable of success.

What should be understood is that it is common for smokers to make multiple attempts at quitting before they are successful. Look at each quit attempt as a learning process. Each attempt teaches you what doesn't work for you and how you can be more successful next time.

It is also important to improve your negative mood towards quitting. Many smokers associate fear, stress, and anxiety with trying to quit. However, if you plan properly and surround yourself with the proper support you are more likely to conquer the habit.

## PLANNING AND MAKING QUIT ATTEMPTS:

### A.DEVELOPING A QUIT PLAN

Your first step to quitting is to develop a quit plan. Here are key elements of a successful quit plan as outlined by the STAR acronym.

#### 1. Set a quit date

It is important to set a quit date as soon as possible. Giving yourself a

### Time since quitting

Within 20 minutes :

12 hours :

2-12 weeks :

1 year:

5 years :

10 years :

15 years :

### Beneficial health changes that take place

Heart rate and blood pressure start decreasing

Carbon monoxide level in blood drops to normal.

Lung function start improving

Risk of coronary heart disease becomes half that of a smoker.

Stroke risk reduced to that of a non-smoker 5 to 15 years after quitting.

Risk of lung cancer falls to half that of a smoker and your risk of other cancers decreases.

Risk of coronary heart disease is that of a non-smoker's.

short period to quit will keep you focused and motivated to achieve your goal.

### **2. Tell your friends, family, and coworkers.**

It is important to share your goal to quit with those you interact frequently.

Ask them for support. They can support you by reminding you of your goal to quit and encouraging you to not give in to temptations and cravings.

Ask them for understanding. If you have friends or family that smoke, it is a good idea to ask them to refrain from lighting up when you're around!

### **3. Anticipate challenges to the upcoming quit attempt.**

Quitting smoking is no easy feat. It's important that you anticipate triggers and challenges in the upcoming attempt, particularly during the critical first few weeks. The first few days and weeks will be the hardest due to potential nicotine withdrawal symptoms as well as the obstacles presented by breaking any habit.

### **4. Remove tobacco products from your environment.**

It's important to minimise exposure to smoking cues. If the tobacco products are still around, you will be more tempted to pick them up and smoke. It's best to rid yourself of such temptations by removing cigarette packets, lighters, match box, ash trays etc and try making a smoke free house and office. If you live or work with other smokers who are not yet ready to quit, ask them not to smoke at home, at work place and when they are with you.

## **B. STRATEGIES AND SKILLS**



**Quitting smoking is no easy feat. It's important that you anticipate triggers and challenges in the upcoming attempt, particularly during the critical first few weeks**

## **TO OVERCOME COMMON BARRIERS AND CHALLENGES TO QUITTING**

In order for you to develop and implement your quit plan successfully, it is important that you familiarise yourself with the common challenges and barriers to quitting and effective coping strategies and skills. The challenges to quitting are typically classified into three categories: physical addiction, behavioural and social connections, and psychological or emotional connections.

### **1. Physical Addiction**

As mentioned previously, Nicotine is an addictive substance. It affects the dopamine systems in your brain and your brain and body become used to functioning on certain level of nicotine. When you quit, the absence of nicotine in your brain will make you feel uncomfortable and cause withdrawal symptoms.

Nicotine withdrawal symptoms refer to a group of physical and mental changes that may occur from suddenly stopping the use of tobacco such as headaches, coughing, cravings, increased appetite or weight gain, mood changes (sadness, irritability, frustration, or anger), restless, decreased heart rate, difficulty concentrating, and insomnia. The good news is that these symptoms are normally temporary (2-4 weeks) and will subside as your body learns, again, how to function without the high levels of nicotine. There are also effective methods available to help you overcome them.

There are two ways to deal with nicotine withdrawal symptoms: cognitive-behavioral therapies and pharmacological/medical therapies.

#### **1.1 Cognitive-behavioural therapies**

Cognitive behavioral therapies can effectively help smokers alleviate withdrawal symptoms. Here is one such example.

The 4D strategy to deal with smoking cravings

1) Delay:

Set a time limit before you give in to smoking a cigarette. Delay as long as you can. If you feel that you must give in to your urge, move on to step 2.

2) Deep breathing:

Take 10 deep breaths to relax yourself. Try to mediate with deep breathing to relax yourself from within until the urge passes. If the urge does not subside, move on to next step.

3) Drink water:

Drinking water is a healthy alternative to sticking a cigarette in your mouth. Water also helps flush out toxins to refresh your body. If you still crave for cigarettes, move on to next step.

4) Do Something else to distract yourself:

Reading, going for a walk, listening to music, watching TV or engaging in any hobby you like will help to shift your focus from tobacco.

Try focusing on positive thoughts about quitting or filling your head with happy, uplifting music to drown out the negative thoughts and emotions that you are experiencing. Remind yourself of all the benefits of quitting smoking; think of how much better you will physically feel, think of all the extra energy you will have.

The best way to deal with restlessness associated with withdrawal is to get up and move around and engage in some form of physical activity. Yoga, meditation, and mental imagery are great ways to focus on concentrating and regain

your abilities to function normally.

Relaxation methods and regular exercise are good for overcoming sleeping problems associated with nicotine withdrawal.

And don't forget to eat and sleep well and drink lot of water...

### 1.2 Pharmacological therapies

In addition to behavioural therapies, there are also drug therapies available to help overcome nicotine withdrawal symptoms.

There are two major types of medication available that may be able to relieve withdrawal symptoms:

1. Nicotine replacement therapies



(NRTs) : Nicotine Gum and Nicotine patches

2. Non-nicotine replacement therapies: Medications like Bupropion and Varenicline.

If non pharmacologic methods are not enough to help you overcome nicotine withdrawal , you can try these drug based therapies, but it is always better consult a doctor before you try drug based treatment .

## 2. Emotional/PSYCHOLOGICAL CONNECTIONS

As a smoker, you subconsciously link cigarettes and smoking with certain emotions, thoughts, and beliefs. Part of quitting involves breaking those subconscious connections. Some common links that smokers form include smoking when they feel stressed, happy, sad or angry.

In addition to linking emotions or feelings with smoking, it is also common to link certain beliefs with smoking...Fore.g.:

- “Smoking helps me relax.”
- “Smoking help me concentrate

- “It's cool to smoke!”

In order to avoid being derailed by such emotional or psychological roadblocks, it is important to remember and remind yourself of the risks of smoking and the benefits of quitting. You can create positive self-talks based on the benefits of quitting such as “Quitting smoking can save my life”and “quitting smoking can save me money”, to

## Heart info



help you break the connections between quitting and negative beliefs.

### 3. Behavioural and social connections

Smoking is an addictive habit and it gets so intimately tied to your everyday activities. To quit smoking is to, once again, break these connections that have formed the habit. Your smoking may be associated with other habits or behaviour such as watching television, talking on the phone, eating, and hanging out with friends. Below are just a few suggestions on how to begin breaking the links of smoking and certain behaviours.

**Smoking after eating :** Begin a new activity immediately after eating. Distract yourself from the temptations and urges. Wash the dishes, exercise, read, or do other household chores are just a few examples.

**Smoking as a social activity (while with friends or coworkers) :** Avoid these situations until you have successfully quit smoking. You do

not have to cease ties with your friends all together, just avoid going to dinner, or out, with them until you are strong in your commitment to abstain.

**Smoking as a stress reliever :** This is a common misconception believed by many smokers. Smoking has absolutely no connection to stress relief. However, there are many other ways to deal with stress. Drink water or tea, carry around a stress ball to keep your hands busy, practice deep breathing or exercise to relieve stress.

**Smoking in the car :** Remove all cigarettes from the car, listen to music, take public transportation, or carpool to help avoid temptation.

It is important to always keep your end goal at the forefront of your mind so that you are not derailed by your connected habits. If you find yourself craving a cigarette, get up and remove yourself from the situation –whatever it may be! Do what you must to distract yourself until the tied habits are no longer a trigger for smoking cravings.

Typically cravings/urges are brief, lasting only 1 to 2 minutes.

These three categories, while separate on paper, are not necessarily separate obstacles. Success in dealing with symptoms of one category can help you deal with symptoms from the other categories as well. Every quit attempt is unique to the smoker trying to quit and you may experience challenges and barriers not listed here and should be prepared to face it.

### C. PREPARING FOR RELAPSE

Every quit attempt is a positive step in the right direction towards quitting permanently. It might take multiple quit attempts, but each time you resume your attempt to quit, you move farther and farther in the right direction and will make it easier for you to stop next time. Relapsing and making mistakes are only natural. Do not let a relapse hinder your confidence - a relapse does not mean failure. Use any relapse as a learning experience in how to develop better coping skills, and to adjust them for future attempts to ensure even greater success.

Smoking is an addiction that is really tough to break and overcome. But with proper understanding, motivation, support, it is possible to conquer the habit. Even though there are plenty of motivational advertisements by government to quit smoking, structured smoking cessation programmes and support systems from governmental health machinery or NGOs are sparse in our country. If such programmes become widely available and accessible, it will be a great step to move towards a smoke free (or at least a 'less smoky') society.

# Instrumental FLASHMOB



An instrumental flash mob was held at the main atrium of the Lulu Shopping mall on April 16, 2019 at 7.00 pm. The flash mob second in the series was performed by the renowned violinist Abhijhit and his band. A well-choreographed event was received by all present very well. Heart Care Foundation one of the principal organisers was represented by its Chairman Dr. Jose Chacko Periapuram, Trust members and Governing Council members. The theme of the event was **'Pause for my brother'**. Mr. Sreesanth former international cricketer was present.

While launching the event Dr. Jose stated that in this busy life of the current generation nobody has time for others and people often forget even the basic courtesies like opening a door for others or even stopping the vehicle for someone to cross the road. He announced that this event will be a pause challenge where people will give a little of their time for others and wants to carry this challenge forward. Mr. Sreesanth also addressed the audience and challenged them with a victory sign. Dr. Jose also challenged Sreesanth in his bowling action. Mr. Abhijhit and his band entertained the crowd at Lulu with some hit numbers.

**Did you know?**

The first Heart Transplant was done on Mr. Louis Washkansky on December 03, 1967 by South African Dr. Christian Bernard. The first transplant in Kerala was done by Dr. Jose Chacko Periapuram in 2003 and the recipient was Mr. Abraham

# 25 Heart-Healthy Cooking Tips



**To lower your risk of heart disease or to manage your existing disease, try these tips for preparing meals.**

## **Limit Saturated and Trans Fat**

- Include plant foods as sources of protein, including soybeans, pinto beans, lentils and nuts.
- If you eat meat, select lean cuts of beef and pork, especially cuts with “loin” or “round” in their name.
- Cut back on processed meats high in saturated fat, such as hot dogs, salami and bacon.

- Bake, broil, roast, stew or stir-fry lean meats, fish or poultry.
- Drain the fat off of cooked, ground meat.
- When you make a stew or soup, refrigerate leftovers and skim off the fat with a spoon before reheating and serving.
- Eat fish regularly. Try different ways of cooking such as baking, broiling, grilling and poaching to add variety.
- Replace higher-fat cheeses with lower-fat options such as reduced-fat feta and part-skim mozzarella.
- Thicken sauces with evaporated fat-free milk instead of whole milk.
- Move toward using lower-fat milk and yogurt. Start with 2-percent products, then move to 1-percent and finally to fat-free to adjust to the new taste.
- Use liquid vegetable oils and soft margarine instead of stick margarine or shortening.
- Limit *trans* fats often found in foods such as cakes, cookies, crackers, pastries, pies, muffins, doughnuts and french fries. Many food manufacturers have removed *trans* fats from their foods. Check the Nutrition Facts Label on food packaging to see if *trans* fats are listed.
- Use small amounts of oils such as canola and olive in recipes and for sautéing.
- Make salad dressings with olive or flaxseed oil.

## **Eat Foods Containing Omega-3 Fatty Acids**

- Select oils that provide omega-3 fatty acids, such as canola or flaxseed oil.



- Add walnuts to cereal, salads or muffins. Try walnut oil in salad dressings, too.
- Eat two 4-ounce portions of fatty fish each week, such as salmon, lake trout, albacore tuna (in water, if canned), mackerel and sardines.
- Some chickens are given feed that is high in omega-3s so their eggs will contain more as well. When buying eggs, check the package label.

#### Reduce Salt (Sodium)

- Prepare foods at home so you can control the amount of salt in your meals.
- Use as little salt in cooking as possible. You can cut at least half the salt from most recipes.
- Add no additional salt to food at the table.
- Select reduced-sodium or no-salt-added canned soups and vegetables.
- Check the Nutrition Facts Label for sodium and choose products with lower sodium content.
- Season foods with herbs, spices, garlic, onions, peppers and lemon or lime juice to add flavor. ■ ■

## Skipping breakfast may increase stroke and heart risks

Skipping breakfast might increase your risk of developing cardiovascular disease.

The connection, found in a study of 6,550 adults aged 65-75, was particularly strong for strokes.

Almost 60 per cent of the participants had breakfast every day, a quarter on some days, and 16 per

cent rarely or never. All were free of heart disease at the start of the study. Over an average 17 years of follow-up, there were 2,318 deaths, including 619 from cardiovascular diseases.

People who never ate breakfast were more likely to be obese and have high cholesterol, but the observational study, in the *Journal of the American College of Cardiology*, controlled for these and many other health, behavioural and socioeconomic factors.

Compared with those who had breakfast every day, those who skipped the meal had an 87 per cent increased risk of death from any cardiovascular disease and a 19 per cent increased risk of death overall. Breakfast skippers had a 59 per cent increased risk of developing heart disease, and more than triple the risk of having a stroke.

“Many studies have shown that skipping breakfast is related to a higher risk of diabetes, hypertension and high cholesterol,” said lead author Dr Wei Bao, assistant professor of epidemiology at the University of Iowa. “Our study suggests that eating breakfast could be a simple way to promote cardiovascular health. ■ ■



# What's the best way to measure body fat?

**Being overweight or obese increases your risk of many health problems. But it's not just the amount of fat: where it is matters too.**

**F**at around the abdomen (belly) is linked to even higher risks of diabetes, heart and circulatory disease and cancer.

So, how exactly do you measure body fat? There are numerous methods, some better than others.



## Weight

This is a measure of your overall body mass – including bones, blood, organs and fat. For it to be accurate, you need reliable scales.

If you're tracking your weight over time, weigh yourself at the same time

of day, under the same conditions and on the same of scales. In the morning, after emptying your bladder, is a good time.

### The plus side:

Quick and easy with minimal cost.

### The downside:

It only measures total body weight – it doesn't take into account changes in body fat or muscle, and it doesn't tell you where the fat is. For body fat, you need to use other body composition methods such as skinfolds or smart scales. ■



## Body Mass Index (BMI)

BMI is used to work out if you are a healthy weight. It is calculated by taking a person's weight in kg and dividing it by their height squared. The higher the figure, the more overweight you are and the greater your health risks.

### The plus side:

Quick and easy and with minimal cost. And it matters: for most adults, there is a clear correlation between higher BMI and negative health consequences. As with any weight measure, you need reliable scales, plus you'll need a tape measure for height.

### The downside:

It can't differentiate between fat and lean muscle weight. It isn't very accurate for people who are elderly, pregnant, or very muscular. ■

## Waist circumference

This is a measurement of your waist to check if you are carrying too much fat around your abdomen (belly). You can have a healthy BMI and still have



excess abdominal fat, meaning you are still at risk of heart disease, type 2 diabetes and stroke. ■

### The plus side:

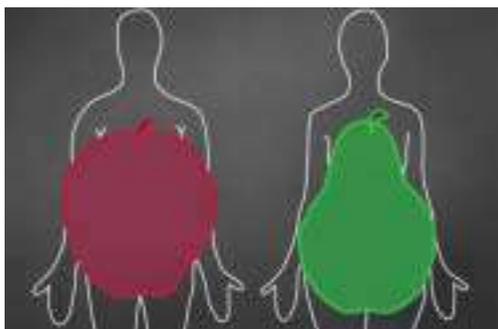
All you need is a tape measure. It's a good way to measure fat round your abdomen.

When measured properly, its accuracy is typically within 5 per cent of the body fat value measured using underwater weighing, which is one of the most accurate ways of measuring body composition.

### The downside:

These are measurements of excess body fat, not a precise measurement of body composition. For an accurate reading you need to know where to place the measuring tape.

Wrap a tape measure around the waist midpoint between the bottom of your ribs and top of your hips. For most people this is just above the belly button. ■



### Waist: hip ratio

This is the ratio of waist circumference to the hip circumference. The higher the ratio, the more fat is stored around the waist or abdomen – in other words, an “apple shape”. This shape poses a greater

health risk than fat stored elsewhere in the body (a “pear shape”).

### The plus side:

All you need is a tape measure and a simple calculation: waist measurement divided by hip measurement. You can use any units as it is only the ratio that is important. High risk is defined as a waist-hip ratio above 0.90 for males and above 0.85 for females.

### The downside:

You need to know where to place the measuring tape – measure the circumference of your hips at the widest point of your buttocks. For your waist circumference you need to measure around the waist, midway between the bottom of your ribs and top of your hips. ■



### Weight to height ratio - the “string challenge”

This is another way of looking at how much abdominal (belly) fat you have. Measure your height with a piece of string, then fold the length of string that matches your height in half and check to see if it fits around your waist. If it doesn't, it means you are at increased risk of type 2 diabetes and heart and circulatory disease.

### The plus side:

You only need a piece of string (a tape measure will also work). It works for any race, age or gender. ■

### Skinfold measurements – callipers or “the pinch test”



Skinfold calipers measure the thickness of your subcutaneous fat – the fat underneath the skin – at certain body locations.

**Calipers are the cheapest, easiest and most portable method to measure body fat in specific areas.**

Using at least three spots on your body – chest, abs and thigh are often used – pinch the skin, pulling the muscle away from the fat and measure the fold with the calipers.

Always test on the same side. It is recommended to take the average of two measurements at each place. You then put those numbers into an online calculator which will give you your body fat percentage.

However in practice it is more useful to use the measurements as a way to monitor body fat over time, rather than having to calculate your percent body fat each time. If your skinfold thickness is going down, then you are probably losing fat. >>>

### The plus side:

Calipers are the cheapest, easiest and most portable method to measure body fat in specific areas. If it's body fat you're concerned about, these probably give the best trade-off between cost, convenience and accuracy of all of these tests.

### The downside:

Simple when you know how, but the accuracy depends on the skill of the person taking the measurements. It is best to have the same person take the measurements each time. If you are uncomfortable stripping down in front of the tester, it may not be the test for you. It can be difficult to get reliable measurements if you are obese.



### Bio impedance – “smart scales”

Smart scales don't just give your weight, but also a host of body composition stats including your body fat percentage. They can look like normal scales with foot plates, or have additional hand plates.

They work by sending tiny electrical impulses through the body and measuring how quickly they return.

This works because the current flows

more easily through the parts of the body that are mostly made up of water, such as muscle and blood, than through fat or bone.

### The plus side:

Simple and quick. The measurement can be taken as easily as standing on scales. The percentage of body fat is given instantly. Some will also connect to a fitness app so you can track your progress.

### The downside:

The reliability of the results can vary – if you're dehydrated then the amount of body fat will be overestimated. You also need to take the measurements in similar conditions to get reliable and accurate results. They are not suitable for people with pacemakers.



### Hydrostatic weighing (underwater weighing)

Underwater weighing measures your density, which is then used to estimate body fat. Fat is less dense than bone and muscle, so a person with a higher percentage of fat will weigh less underwater, relative to the amount of water they displace, and be more buoyant.

You will need to sit on an underwater mounted chair and scale. Once you have expelled all the air from your lungs, you will be lowered into a tank of water until fully

submerged and remain motionless while the underwater weight is measured.

### The plus side:

It is a very accurate technique. Consistent results means that it is a reliable method to measure progress.

### The downside:

Most tanks are located at universities or research institutions and may not be open to the public. It needs considerable commitment, as it requires you to be fully submerged for 5-7 seconds and repeated 2-3 times, so it's not suitable for the elderly or children.

This method is also not the best for assessing athletes, as they have denser bones. It does not identify the exact parts of the body where the fat is located. It is less common since the introduction of air displacement assessment, which is easier to do.

### Air displacement - Bod Pod

The Bod Pod technology is similar to underwater weighing but uses air instead of water. You are weighed before sitting in a small 'pod' machine. By measuring how much air is displaced whilst in the 'pod', body density is measured from which body

fat can be calculated.

**The plus side:** It is safe, non-invasive and fast. It is very accurate with excellent reliability for repeat tests. Unlike underwater weighing, the Bod Pod does not require getting wet. The pod accommodates people of any age, shape and size and is

accurate for groups including children, obese, elderly, and disabled people.

**The down side:** It is unlikely to be found in your local gym, mainly in research and academic institutions. The test also does not identify the exact parts of the body where the fat is located.



machine arm passes over your entire body, which emits a high- and a low-energy X-ray beam.

**It is considered the gold standard for measuring body composition.**

By measuring the absorption of each beam into parts of the body, technicians can get readings for bone mineral density, lean body mass and fat mass.

**The plus side:**

This method is safe, precise, reliable and quick - around 4 minutes. It is considered the gold standard for measuring body composition. It tells you not just how much fat you're carrying, but how it's distributed around your body.

**The downside:**

The high level of accuracy comes with a price tag.

## DEXA (Dual Energy X-ray Absorptiometry)

DEXA is more commonly used to assess bone density, but can also be used to measure body composition. You lie still on a table while a

## The "thigh gap" test

This is based on the premise if you can stand with your legs together and see a gap between your thighs – 'a thigh gap' – you're slim. For some it is seen as a desirable shape and something to aim for, but it is not necessarily healthy or normal.

**The plus side:**

None. There is no health benefit to having a thigh gap.



Whether you have a thigh gap is due to your bone structure and body shape, not if you are thin or not. If your hips are wider in relation to your knees, you will

have more curves compared to those with narrower hips, even if you are the same weight.

Also, most women's bodies accumulate either muscle or fat in the thigh area, which can also cause a closure of any gap.

**The downside:**

Having goals that are purely based on aesthetics rather than health or performance can leave you frustrated and knock your body-image. And it might distract you from using a more sensible measurement (like BMI or waist measurement) instead.



## Circumference body fat calculator

This method to estimate body fat works by entering a number of body circumference measurements, such as waist, hip, forearm, as well as your gender height and weight, into a calculator based on the US Navy body fat formula. There are various websites that will calculate this for you, using the measurements you take.

**The plus side:**

You only need a measuring tape.

**The downside:**

For accurate readings you need to know where to place the measuring tape. It is only an estimate of body fat.

**The bottomline:**

Expensive, in-a-lab methods are the most accurate; calipers probably give the best trade-off between cost, convenience and accuracy. But if you are just looking to monitor your progress, noticing how your clothes fit is as good as anything too.

# What is the best time to take statins and why?

Statins are cholesterol-lowering drugs. Some statins work best in the evening while others work just as well in the morning. The best time to take statins depends on the specific drug.

Statins are a type of prescription medication that can lower a person's risk of heart disease. They do this primarily by reducing a person's low-density lipoprotein (LDL) cholesterol.

There are several different types of statin on the market, which the body may process differently. People may need to take some statins at specific times of the day to get the most benefit from them.

In this article, we look at the effects of statins at different times of the day and discuss the best times to take certain types. We also cover side effects and how a person can choose the right statin to suit their needs.

## What do statins do?

Statins are also called lipid-lowering medications or HMG-CoA reductase inhibitors. They reduce the levels of LDL cholesterol in the blood.

LDL cholesterol, which people sometimes refer to as bad cholesterol, can build up in the arteries and form plaque. This plaque can block blood flow in the arteries,



leading to heart attack and stroke.

Statins block an enzyme in the liver that makes cholesterol, which reduces the risk of plaque buildup. Statins may also help the body remove cholesterol that has started to accumulate in the arteries.



Conversely, high-density lipoprotein (HDL), or good, cholesterol can reduce the risk of heart attack and stroke. Doctors consider HDL cholesterol to be beneficial because it can transport other forms of cholesterol from the blood to the

liver, which helps the body get rid of bad cholesterol.

Studies have shown that statins are effective in improving a person's cholesterol levels:

### Best time to take different statins

It is important that a person taking statins follows the advice of their prescribing doctor regarding the time of day to take them. The recommended time, which is something that a person should discuss with their doctor, will vary depending on the type of statin.

### Short-acting statins

A systematic review found that short-acting statins worked best when people took them in the evening. The people who took these statins toward the end of the day had lower total cholesterol and LDL cholesterol levels compared with the people who took

them in the morning. Another review came to the same conclusion.

Short-acting statins work better at night because the liver enzyme that produces cholesterol is more active at this time. Most short-acting statins have a half-life of 6 hours. A medication's half-life is the time that it takes for the body to process and remove half of the medication.

**Short-acting statins include:**

- lovastatin
- fluvastatin  
(the standard-release tablet)
- pravastatin
- simvastatin

**Long-acting statins**

It takes longer for the body to process long-acting statins, which may have a half-life of up to 19 hours.

The two reviews above noted that long-acting statins worked equally well whether a person took them in the morning or the evening. Therefore, people taking long-acting statins can choose which time of the day best suits them.

The authors recommend that people using long-acting statins take them at a time of day that is easy for them to remember. It is important to be consistent with the timing of doses, so if a person prefers to take statins in the morning, they should take them in the morning every day.

**Long-acting statins include:**

- atorvastatin
- fluvastatin  
(the extended-release tablet)
- rosuvastatin

People who are taking statins may need to take them indefinitely. In many cases, when a person stops taking statins, their cholesterol levels increase again. People should not stop taking statins without a doctor's approval.

Some people might be able to stop taking statins or reduce their dosage if they significantly lower their risk of heart disease. A person may do this by losing a significant amount of weight, quitting smoking, or making other major lifestyle changes that improve their health. Even in these cases though, a person should talk to a doctor before they stop taking statins or any other medications.

**Which statin is right for me?**



Statins come in a range of types and dosages. A person can discuss with their doctor which type of statin may work best for them. The doctor's recommendation will depend on many factors, including the person's:

- current cholesterol levels
- other risk factors for heart disease

- other medical conditions, such as diabetes
- family history of heart disease
- other medications

If a person has an increased risk of heart disease, their doctor may prescribe a higher dosage or a long-acting statin. Conversely, a person with less risk of heart disease may start on a lower dosage or a short-acting statin.

Recent evidence suggests that many people can benefit from taking statins, even if they do not have high blood cholesterol levels.

The American Heart Association say that statins can benefit people who have an average risk of heart disease, especially when they take them in

combination with medications to lower blood pressure.

**Side effects of statins**

Statins do not cause serious side effects for most people. According to the American College of Cardiology, as many as 90 percent of people taking statins do not experience

bothersome side effects. For those who do experience side effects, these may include:

- muscle aches, weakness, or cramps
- constipation or diarrhea
- nausea
- headaches
- dizziness
- fatigue
- muscle inflammation, or myositis, which can be serious
- new-onset diabetes, especially in people with other risk factors for diabetes

The Food and Drug Administration (FDA) state that the risk of these side effects is small and that the benefits of statins usually outweigh this risk.

Some reports have warned that statins can cause severe memory loss, but an investigation found inconsistent evidence of this side effect. Another review states that there is evidence to suggest that statins do not affect memory.

In rare cases, a person taking statins may have serious side effects, such as liver damage or an allergic reaction.

### How to stay healthy when taking statins

Statins can interact with some medications. People who take statins will need to make their doctor aware of any medicines, vitamins, herbs, or other supplements that they take to help prevent dangerous interactions.

Statins may also interact with grapefruit and grapefruit juice. Therefore, it is important to avoid



eating grapefruit or drinking grapefruit juice while taking statins unless a doctor says it is safe.

People who have a higher risk of heart disease can work with a doctor or nutritionist to modify their diet. In many cases, a medical professional is likely to advise the person to eat a diet that is low in cholesterol and saturated fat, free of trans fats, and rich in fruits and vegetables.

In addition, a person may need to increase their weekly exercise and work toward a healthy weight. In this way, they can further lower their risk of heart disease.

Smoking is a significant risk factor for heart disease. A doctor may advise a person to get help with quitting if they do smoke.

Whether or not they are taking statins, people can help keep their cholesterol in check by maintaining a healthy weight, exercising regularly, and eating a healthful diet that contains plenty of fruits and vegetables.

Having a heart condition, or other health condition, can sometimes contribute to loneliness, for example if you've had to give up work or other activities you enjoy.

Here are 12 ideas for things you can do to help you feel less lonely.

#### 1. Take up a new hobby



Retirement is a great time to pick up old hobbies again,

or even take up new ones.

#### 2. Volunteer for a good cause



If there's a charity or organisation you support,

why not volunteer to help it? It can be a great opportunity to get out of the house, meet new people and feel useful.

#### 3. Make friends

You can call to talk to them about how you're feeling or anything else you'd like to.



#### 4. Get into books



If you enjoy a good read, you might enjoy being part of a book club. It can be fun and mentally stimulating to discuss books

# 12 ways to beat loneliness following your heart disease

with like-minded people.

You could set up your own group, and meet up every month, taking turns to host it in your house and provide snacks. Otherwise, you can ask your local council or librarian if they know of existing book clubs.

If you just want to read with others around you, most libraries provide access and facilities for the elderly and people with limited mobility.

## 5. Gardening



If looking after your garden has become too strenuous, it doesn't mean that your gardening days are over

It's a great way to get some fresh air and gentle exercise, and rewarding to grow your own flowers or vegetables.

## 6. Board games

Board games can be a great way to interact with other people and have a bit of fun. Many of the classic board games that we enjoyed in our youth are still popular – anyone for Scrabble, Monopoly, backgammon or a good puzzle?



You can enjoy a good board game at any age. Some are available with larger pieces, in case you're not as nimble fingered or your sight isn't as good as it once was.

## 7. Join a Heart Support Group



Heart Support Groups are friendly, supportive local groups for people with heart conditions and their families.

## 8. Go to the cinema

The allure of visiting the cinema and watching a great movie never fades.



## 9. Keep in contact online



If your friends or family live far away or you can't go out to meet them, programmes such as Skype can help you to keep in touch.

Skype allows you to video call someone for free, wherever they are in the world (as long as you both have internet access) so you can see them when you talk.

## 10. Borrow a dog

It's a great motivation for you to go to the park and get some exercise, and it's an easy way to meet other dog owners. There are also groups for dog walkers that you can join.



## 11. Team sports

Team sports are a great way to make friends, because you meet up with the same people on a regular basis. And there are so many that you should be able to find something you enjoy that suits your level of fitness.

## 12. Food, friends and fun

One of the best ways to meet new people and be sociable is over a meal. There are schemes across the country that offer free or inexpensive lunches, coffee mornings and meetups for older people.





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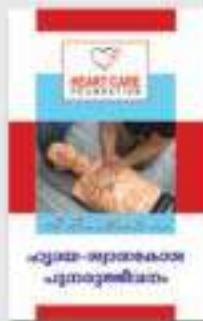
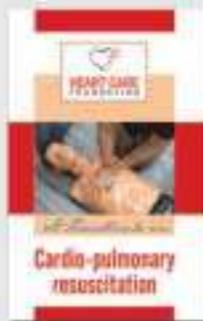


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36/117 A 1, Second floor,  
 Lisie Hospital Road,  
 Kotticanal Junction,  
 Kochi- 682018  
 Phone 0484 2406393  
 Mobile number: 9847006000  
 Email: mail@heartcarefoundation.com  
 Web: www.heartcarefoundation.com

