



# HEART NEWS

...NHI Dialogue

Vol. No. LVII

Since 1963

Health Magazine of All India Heart Foundation & National Heart Institute

October – December 2023



## KNOW YOUR HEART & HEART ATTACK



3



## Protect Your Heart



5



## World Heart Day, 2023

Celebrations at National Heart Institute, New Delhi

8

## Air Pollution and Cardiovascular Disease

12

## कालखंड 1940-2023: देश की सेहत का परिदृश्य

17



## सैर पथ में योग और भोग

20

## स्वास्थ्य संबंधी कुछ नए सुभाषित

21



## ROLE OF NUTRITION IN SMALL CHILDREN

26



# HEART NEWS



...NHI Dialogue

Vol. No. LVII • Since 1963 • Health Magazine of All India Heart Foundation & National Heart Institute • October – December 2023

## TABLE OF CONTENTS

## हृदय स्वास्थ्य संवाद

KNOW YOUR HEART & HEART ATTACK.....	3
Protect Your Heart.....	5
GLEANINGS FROM PRESS.....	7
World Heart Day, 2023.....	8
Health Tips for Winter Season.....	11
Air Pollution and Cardiovascular Disease .....	12
EVERYTHING YOU NEED TO KNOW ABOUT ANXIETY .....	14
Mangalyaan .....	16
कालखंड १९४०-२०२३: देश की सेहत का परिदृश्य .....	17
बढ़ती उम्र में कब्ज की समस्या.....	18
सैर पथ में योग और भोग.....	20
स्वास्थ्य संबंधी कुछ नए सुभाषित .....	21
BASIC ERGONOMICS WHILE DOING A SITTING JOB .....	24
Exercise for restrictive lung Disease .....	22
ROLE OF NUTRITION IN SMALL CHILDREN.....	26

*Dear Readers We value your feed back*

Meeting your expectations is important to us. We appreciate you taking a few minutes to participate in writing your suggestions about this magazine to the editor at: [aihfl962@rediffmail.com](mailto:aihfl962@rediffmail.com)

### Editorial Board:

Chief Editorial Advisor	: Dr O P Yadava
Editor-in-Chief	: Prof (Dr) Shridhar Dwivedi
Guest Editor	: Dr Vinod Sharma
Editorial Team	: Dr (Brig) Y K Arora
	: Dr Adarsh Kumar
	: Dr Vikas Ahlawat
	: Dr Arvind Prakash
	: Dr Karoon Agrawal
Circulation Manager	: Mrs Chandra Zadoo
Circulation Executive	: Mr Shankar
Publisher	: All India Heart Foundation (AIHF)
Creativity	: Mr Sanjay Anthony Das
Printed at	: Glory Graphics
	Z-32, Okhla Industrial Area Phase II
	New Delhi – 110020

### For Advertisement Contact:

Guest Editor / Circulation Executive:-  
[contact@nationalheartinstitute.com](mailto:contact@nationalheartinstitute.com)  
[contact@nhi.in](mailto:contact@nhi.in)

# 2023

## HAPPY NEW YEAR

Health Magazine of :

**All India Heart Foundation  
&  
National Heart Institute**

*For Private Circulation Only*



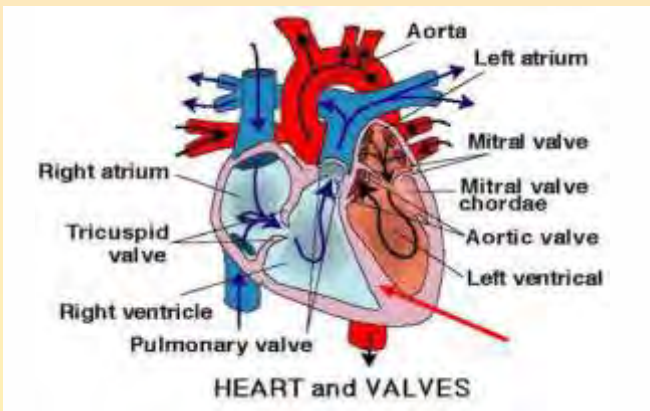
# KNOW YOUR HEART & HEART ATTACK



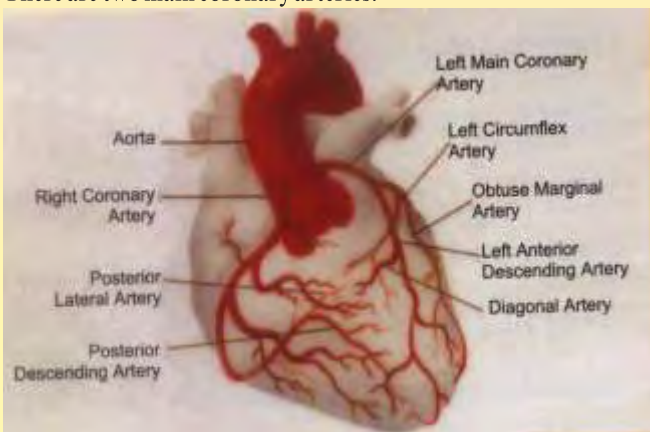
**Introduction:** The human heart is a vital organ responsible for pumping blood throughout the body, delivering oxygen and nutrients to cells and removing waste products. It is located in the chest, slightly to the left of the centre. It is protected by the rib cage and rests between the lungs. The size of the human heart is approximately that of a closed fist. It varies slightly in size from person to person.



**The Structure of the Heart:** The heart has four chambers: Two atria (upper chambers) & two ventricles (lower chambers). The right atrium receives deoxygenated blood from the body, while the left atrium receives oxygenated blood from the lungs. Ventricle's main function is to pump the blood to the various parts of the body. The left side of the heart receives oxygenated blood from the lungs and pumps it into the systemic circulation, while the right side receives deoxygenated blood from the body and sends it to the lungs for oxygenation. The heart has its own blood supply through coronary arteries, which deliver oxygen and nutrients to the heart muscle which keeps on contracting untiringly every minute of an hour & every hour of the day throughout the 365 days in a year.



**Coronary Arteries:** The coronary arteries are the main blood vessels that supply the oxygenated blood to the heart muscles. There are two main coronary arteries:

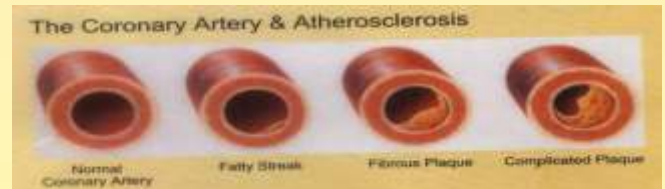
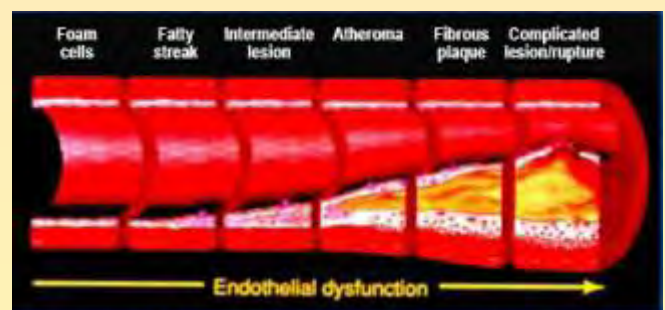


**Left Coronary Artery (LCA):** The left coronary artery arises from the aorta just above the aortic valve. It typically branches into two major arteries: Left Anterior Descending (LAD) Artery: This artery runs down in front of the heart and supplies blood to a significant portion of the left ventricle. Left Circumflex Artery: This artery wraps around the left side of the heart and supplies blood to the left atrium and part of the left ventricle.

**Right Coronary Artery (RCA):** The right coronary artery also originates from the aorta and typically supplies the right atrium, right ventricle, and a portion of the electrical conduction system of the heart.

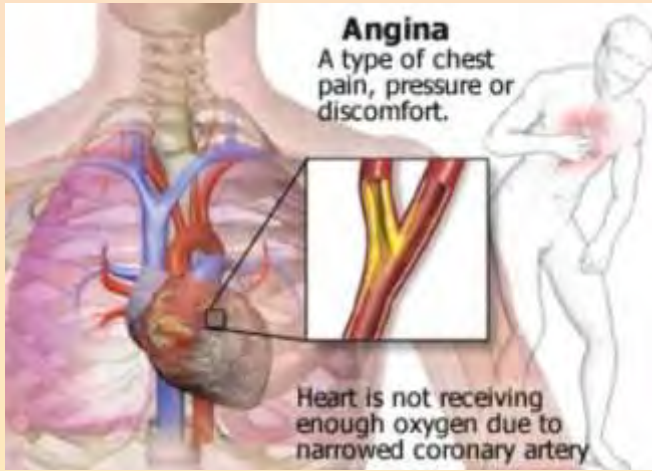
It's crucial for the coronary arteries to provide a continuous and sufficient supply of oxygenated blood to the heart muscle to ensure its proper functioning. Blockages or narrowing in these arteries can lead to conditions like angina (chest pain) or, in severe cases, a heart attack (myocardial infarction), which occurs when the blood flow to a portion of the heart muscle is completely blocked, leading to tissue damage. Atherosclerosis is the commonest cause of these blockages.

**Atherosclerosis:** This is a common and serious medical condition characterized by the buildup of plaque inside arteries. These plaques are composed of cholesterol, fat, calcium, and other substances that accumulate on the inner walls of arteries over the time. As these plaques grow, they can narrow and harden the arteries, reducing blood flow to the heart leading to angina and heart attacks. Several risk factors contribute to the development of atherosclerosis, including a diet high in saturated and trans fats, smoking, high blood pressure, diabetes, obesity, genetics, and lack of physical activity.



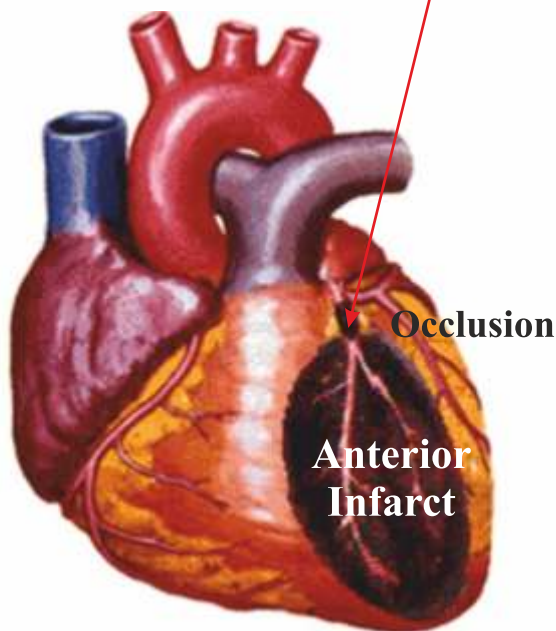
**Angina:** also known as angina pectoris, is a medical condition characterized by chest pain or discomfort during physical exertion or mental stress and typically subsides after taking rest or medication. That occurs when the heart muscle doesn't receive enough oxygen-rich blood. It is typically a symptom of an

underlying heart problem, most commonly caused by coronary artery disease (atherosclerosis). This is diagnosed by classical history, electrocardiograms (ECGs), stress tests, and coronary angiography. Angina is a serious condition that requires medical attention. The treatment of angina aims to relieve symptoms, improve blood flow to the heart, and reduce the risk of heart attacks. Treatment options include: Lifestyle changes, medications: Such as nitro-glycerine for immediate relief of symptoms, beta-blockers, calcium channel blockers, and antiplatelet drugs. In some cases, invasive procedures like angioplasty and stent deployment or coronary artery bypass surgery may be necessary to open blocked arteries and improve blood flow.



**Heart attack:** A heart attack, medically known as myocardial infarction, is a serious and life-threatening condition that occurs when a portion of the heart muscle doesn't receive adequate supply of oxygenated blood. This usually happens due to the sudden blockage of a coronary artery, one of the blood vessels responsible for supplying blood to the heart muscle.

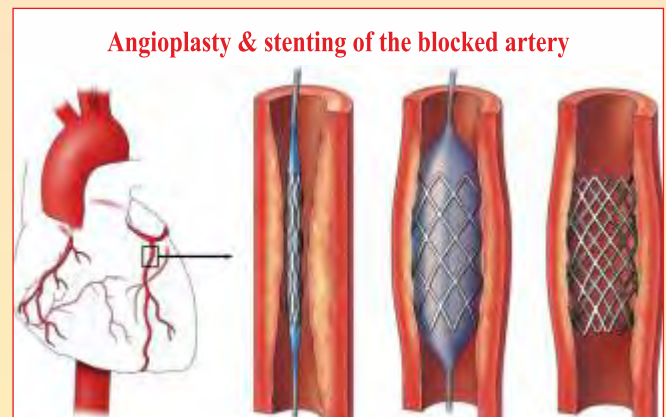
**Occlusion of proximal left anterior descending coronary artery**



The most common cause of a heart attack is the erosion or rupture of an atherosclerotic plaque, which can lead to the formation of a blood clot that obstructs the flow of blood through a coronary artery. Other causes may include coronary artery spasms, blood vessel inflammation, or conditions that increase the heart's workload.

**Symptoms:** Symptoms of a heart attack include- Severe prolonged chest pain or discomfort at rest which is often described as crushing, squeezing, or burning sensations. This pain may radiate to the arms, neck, jaw, shoulder, or back. It is usually associated with shortness of breath, cold sweat, nausea, lightheadedness, or sometimes fainting. Diagnosis is made based on history, clinical examination, ECG, blood tests for cardiac enzymes, and imaging studies like Echocardiography and Angiography.

**Immediate Treatment:** includes administration of medications like aspirin, nitro-glycerine, statins and thrombolytic (Clot buster) therapy which helps in opening the blocked artery and in preventing further clot formation. Alternatively, patient is subjected for Angiography followed by Angioplasty & stenting of the blocked artery to restore blood flow to the heart.



Prompt diagnosis and immediate medical intervention are critical in minimizing the damage caused by a heart attack. Time is of the essence in preserving heart muscle and improving the chances of a successful recovery.

**Recovery and Rehabilitation:** After a heart attack, individuals may undergo cardiac rehabilitation programs to help them recover, regain strength, and reduce the risk of future heart problems. Lifestyle changes, such as adopting a heart-healthy diet, regular exercise, quitting smoking, reducing stress by meditation and timely intake of medicines are also important for long-term recovery.

**Dr Y K Arora**  
Senior Consultant Cardiology,  
National Heart Institute



# Protect Your Heart



**W**ithin last fifty years India is witnessing a rapid transition in its health scenario wherein non communicable diseases particularly cardiovascular diseases have become principal cause of mortality (70%) and morbidity pushing communicable diseases behind though still lurking to strike now and then. Even within cardiovascular diseases coronary artery disease (CAD) , colloquially known as heart attack, is now affecting poorer people at same pace as that of rich and middle income and at much more young age in their twenties and thirties what used to be in late forties or early fifties about two decades ago. We come across cases where celebrities as well as commoner die suddenly at prime of their age while acting, singing, playing sports like cricket, football , marathon or while in gym doing vigorous exercise . Unfortunately, they suffer premature CAD because of the risk factors like, stress, depression, sedentary lifestyle, hypertension, consumption of alcohol/tobacco, smoking and family history.

Searching further, one finds that one in three Indian adults suffer from hypertension primarily due to faulty lifestyle which is stressful, spiritfull(alcohol), sedentary, junkful and saltful (lot of salt in diet) . Looking further we observe that one out of four adult is suffering from obesity and/or T2DM. The cause is junk food, juice, soft drinks laced with sugar and sedentary lifestyle.

NCD Epidemic – Why are we so passionate ?		
Disease	Estimated number of people affected	Major Risk factor / End result
Obesity	155 million	Physical inactivity , faulty diet, exercise - <b>Leads to atherosclerosis</b>
Hypertension	140 million	Faulty diet, lot of salt, physical inactivity, alcohol, stress. <b>Leads to atherosclerosis</b>
Diabetes	64 million	Obesity , faulty diet, stress , SGT. <b>Leads to atherosclerosis</b>
CAD	31.8 million	Smoking / tobacco, physical inactivity, faulty diet, stress. <b>Mostly due to atherosclerosis</b>
Cancer	1.33 million	Smoking/tobacco faulty diet, physical inactivity
Stroke	1.2 million	Hypertension, smoking/tobacco, Physical inactivity - <b>Mostly due to atherosclerosis</b>
Chronic respiratory diseases	30 million	Smoking , obesity syndrome X - <b>highly inflammatory condition may lead to atherosclerosis</b>

A quick look at the major noncommunicable diseases is worth revealing ( Table-1):

Thanks to Framingham Heart Study initiated in early 1960's ;it is now firmly established that following 'Risk Factors' make people prone to CAD:

## MODIFIABLE / Major Risk Factors

- Smoking / Smokeless tobacco / Vaping - electronic cigarettes/ Flavoured hookah smoking
- Lack of exercise
- Un healthy dietary habits
- Obesity
- High blood pressure
- Diabetes (High blood sugar)
- Stress
- Depression
- Deprivation of adequate sleep
- Excessive use of electronic gadgets ( smartphone, laptop, computers etc )

## Non -Modifiable Risk Factors: Genes/Heredity

### Age and sex

Remember Cigarette Smoke Contains 7000 poisonous substances. Most dangerous among them are ammonia, arsenic, carbon mono oxide, hydrogen cyanide, naphthalene, nicotine, tar and certain radioactive compounds. It is said that :

**Smoking like breathing fumes,  
Inhaling seven thousand toxins,  
Inviting plethora of morbidities,  
Writing own warrant of death.**

Tobacco smoking is the most dominant risk factors for heart attack in young individuals. Ordinarily female sex is not prone for coronary artery disease at young age but those female who smoke, vape or use tobacco of any kind may suffer heart attack at early age. Let alone myocardial infarction smoking is also primarily responsible for dual lesions in young people such age oral cancer and heart attack at same time in same individual. Those who do not leave smoking and /or tobacco ultimately land at one of these places:

1. CCU (Heart Attack)
2. Respiratory Unit (Respiratory Failure)
3. Cancer Hospital (Cancers of Mouth, Lungs, Breast, Cervix etc.)
4. Emergency (Stroke, Trauma, Bleeding)
5. Morgue (Sudden Death)

## Diet:

Vegetarian diet comprising of fruits and vegetables is the best diet. Similarly Mediterranean diet is another choice for keeping one's heart healthy. Diet full of medicinal values should be our choice rather than diet full of chemicals and processed material. Further, food containing red meat is dangerous for heart as well as for gut making one prone for colonic cancer. Current trend of eating junk food, fast food like sandwich or food which is over fried with salt and oil is detrimental to heart, liver and gut resulting in dyslipidemia, raised sugar, raised blood pressure, fatty infiltration of liver and premature atherosclerosis. The current day dictum for good health is: junk the junk.

## Alcohol:

According to recent WHO recommendation alcohol taken in any quantity is dangerous for health. Alcohol plays significant role in producing hypertension, arrhythmia, heart failure, cardiomyopathy and coronary artery disease It is also associated with seven types of cancer in the body.

## Obesity /Central Obesity:

It is said that 'Tummy, tobacco, stress puts heart at distress' so true a observation in present day scenario. Obesity particularly central obesity is associated with various grades of fatty infiltration of liver depending upon the severity of obesity. Further obesity often leads to with type 2 diabetes, coronary artery disease and liver cancer (Sarin, SK:16th October,2023). The usual scenario in an obese person particularly those who are centrally obese not only suffer from fatty infiltration of liver but fat all around, that is, over pancreas, in aortic bulb, inside carotid lumen ( plaque, increased CIMT), in coronary arteries and in Circle of Willis (cerebrovascular arteries). Where is the surprise if such individuals suffer from heart attack or stroke in the prime of their youth?

## Remedy is Prevention:

One of the most reasonable, effective and almost free remedy to prevent heart disease or for that matter any non-communicable disease like obesity, diabetes, hypertension, cancer, road traffic accident etc. is the advice tendered by Lord Krishna to Arjuna during the epic Mahabharat, **that prescription is :**

युक्ताहार विहारस्य युक्त चेष्टस्य कर्मसु ,  
युक्त स्वप्ना व बोधस्य यगो भवति दुःखहः ।

-श्रीमद्भगवद्गीता 6/17

The prescription is to take appropriate diet, do optimal exercise every day, discharge your duties in a rightful manner, go to bed at appropriate time and get up at appropriate time (Early to bed and early to rise). O, Arjuna this is yoga, and this will make you disease free and healthy. Interpreted in accordance to modern recommendations of various academic bodies & professional societies such as American Heart Association, American Diabetes Association, British Cardiac Society and European Heart Society etc. above statement made some 5000 BC ago is so true and stands to the test of time. Only question is what is appropriate diet, what is optimal exercise, what is proper duty and what are the appropriate hours for sleep and awakening?

आधे घंटे सैर व्यायाम,

तम्बाकू पर पूर्ण विराम,

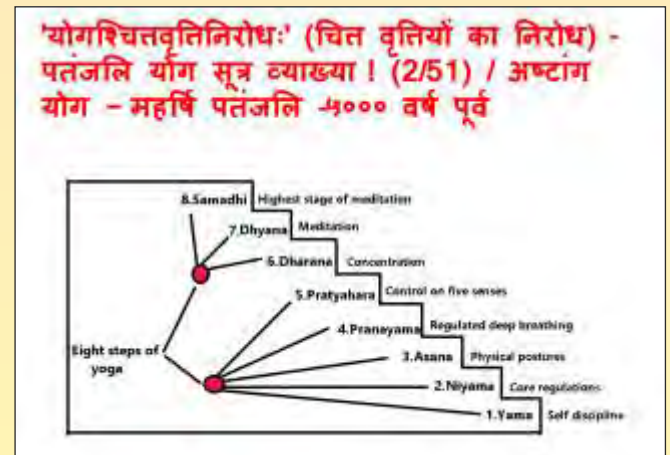
चिकनाई पर कसे लगाम,

अच्छे दिल का यह पैगाम।

It is worthwhile to remember that No active exercise is prohibited for seniors (Tuli SM 2020). Interestingly those who walk or run for half a hour daily have less risk of dementia or cancer.

## Yog ( योग रखे निरोग ):

Another important daily routine to protect one's heart from hypertension , diabetes and or CAD is to lead a life observing yog and meditation which contains eight steps as defined by Maharshi Patanjali some 5000 years ago :



Mind you initial two steps of yam (Restrain) and niyam (Discipline) are the preliminary essentials to reap full benefits of yog for good health.

In summary one can protect his heart from various vagaries of current time pandemic of hypertension, diabetes, heart attack and or some of the cancers by simple lifestyle measures like taking plant based

food – An apple a day keeps the doctors away , exercise/walking , yog way of life, saying no to tobacco of any kind , no alcohol and taking optimal sleep – Early to bed and early to rise.

### Take Away Points:

- Present day pandemic of non-communicating diseases (NCDs) is mainly due to faulty lifestyle
- Parents play major role in development of coronary artery disease and /or diabetes in their off springs
- Tobacco of any kind including vaping, lack of exercise, junk food, stress, sleep deprivation are major risk factors for present day pandemic of atherosclerotic related diseases

- Stress, excessive mobile usage, sleep deprivation and neo gym culture are the emerging risk factors for premature atherosclerosis.
- People who have suffered from COVID-19 are at risk of CAD
- Atherosclerosis is preventable not only in an individual but in his next generation by practicing simple lifestyle measures, yoga particularly meditation and herbs

**Prof. S Dwivedi**

Senior Consultant Cardiologist and Head, Academics  
National Heart Institute, New Delhi

NCDs account of 71% diseases in India

## GLEANINGS FROM PRESS

### Heart damage: Another reason to cut down on children's screen time

The effects of prolonged screen use during childhood have been extensively studied in recent years. Evidence indicates that excessive screen time is harmful both to neurological development and socialisation. This is because, among other things, they cause us to disconnect from our surroundings, leading to very real addictions that often require intervention from a mental health professional.

Screen use can cause neurocognitive learning disorders at the early stages of personality formation in childhood.

Additionally, screen use can cause neurocognitive learning disorders at the early stages of personality formation in childhood.

But above all, excessive time spent in front of televisions, video games, mobile phones and tablets during childhood and adolescence leads to a sedentary lifestyle.

#### Excessive screen time increases heart weight

The research analysed the cumulative effects of sedentary time on the heart, drawing data from Children of the 90s, a landmark multigenerational study that is unique in its breadth and depth of scope.

It tracked the health and lifestyles of 14,500 babies born in 1990 and 1991 into their adult lives.

Of the children included in the study, 766–55 per cent of them girls and 45 per cent boys– were asked at age 11 to wear a smart watch that monitored their activity for seven days.

At age 15 they were asked to repeat this, and then again at 24. In parallel, an echocardiographical analysis was taken of each subject's left ventricle at ages 17 and 24, which was then adjusted for height, sex, blood pressure, body fat, tobacco use, physical activity and socioeconomic status. The results indicated that at



age 11 the subjects were sedentary for an average of 362 minutes per day. In adolescence (age 15) this increased to 474 minutes per day, and then went up to 531 minutes per day in adulthood (age 24).

Sedentary time increased by an average of 2.8 hours per day over the 13 years of the study. A large amount of this sedentary time was spent in front of screens. `Most seriously, the echocardiography registered an increase in heart weight among young people that correlated directly to time spent being sedentary.

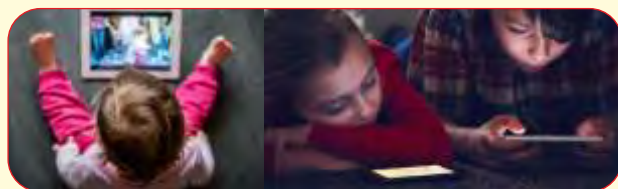
Once they entered adulthood, this increased the likelihood of heart attacks and strokes.

This direct relation between accumulated inactive time and heart damage was independent of body weight and blood pressure.

Parents should encourage children and adolescents to move around more, and limit the time they spend watching television, or using social media and videogames. As we have already suggested with regard to premature birth, the list of known, conventional cardiovascular risk factors (smoking, diabetes, hypertension, etc.) should be revised and updated as a result of the study to include the cumulative time spent engaging in sedentary behaviour in childhood.

We should all, from an early age, heed the words of Martin Luther King when he said "If you can't fly, then run. If you can't run, then walk. If you can't walk, then crawl, but whatever you do, you have to keep moving."

– Parmita Uniyal, Barcelona





# World Heart Day, 2023

Celebrations at National Heart Institute, New Delhi

In pursuance of its objective keeping each 'Heart Healthy' National Heart Institute, New Delhi of All India Heart Foundation carried out several activities at various places starting on 29th September till 10th October 2023. On the main day of 29th September following activities were undertaken in different parts of the country:

1. **Almora, Uttarakhand:** At Inter College Daulaghat, Almora 225 people were examined and given expert advice. Dr O P Yadava, CEO and Chief Cardiothoracic Surgeon and his team of NHI examined a total 158 cases and Dr. Usha Yadava, former Director-Professor-Ophthalmology, Guru Nanak Eye Centre, Maulana Azad Medical College Delhi attended 67 eye patients. Patients were also given free medicines on this occasion. Three underprivileged girl children were selected for free open-heart surgery at NHI. (Pic. 1, 2, 3, 4)



1. Camp at Inter College, Daulaghat, Almora



2. Group Photo with Patients attending Daulaghat on World Heart Day, 2023



3. Dr. Yadava examining a heart patient



4. Dr. Usha Yadava attending a eye patient

2. **At National Heart Institute, New Delhi and Saidulajab, Rural Medical Centre, New Delhi:** Team comprising of Dr Naveen K Sharma, Consultant Cardiologist, Dr R K Verma, Senior Consultant and Dr Sapna Sajal, PGDCC Fellow carried out comprehensive health checkup at NHI & Saidulajab, Rural Medical Centre, New Delhi. A total of 143 cases were given free medicines and essential health education advice regarding heart health. People were very enthusiastic and inquisitive about the prevalent heart ailments. (Pic 5)





5. Health Checkup at National Heart Institute, New Delhi on World Heart Day

**3. Pacemaker Clinic at main NHI Campus:** National Heart Institute has been carrying out pacemaker implantations for over twenty years and doing its follow-up meticulously helping and guiding such cases. In view of recent reports about occurrence of left ventricular dysfunction after few years, it was decided to hold a special checkup of all Pacemaker patients who had undergone pacing at NHI on this World Heart Day under the overall supervision of

Dr. Vinod Sharma, HOD Cardiology and VCEO in association with St. Jude Medical. A total of 86 pacemaker implanted cases were enrolled and comprehensively studied.

**4. District Hospital Morena, Madhya Pradesh:** In one of the most inaccessible and ravine regions of Madhya Pradesh, Dr Basant Sharma, Sr. Resident organized a Health Check Up Camp particularly focusing on Cardiovascular Status. Also conducted Health Awareness Sessions. Around 97 patients were given advice and free care. (Pic. 6 & 7)



6. Health Awareness Session at Morena



7. ECG being done at Morena

**5. District Hospital, Srinagar, Jammu and Kashmir:** Dr. Ghulam Nabi Lone, Senior Consultant Cardiothoracic Surgeon of the NHI organized comprehensive Health Check UP at District Hospital, Srinagar on World Heart Day and gave tips for keeping one's own heart healthy. (Pic. 8)



8. Prof. Ghulam Nabi Lone interacting with people at World Heart Day Camp in Srinagar

**6. Webinar on Heart Health:** A webinar on heart health comprising two talks one on 'Know your Heart' by Brigadier (Dr) Y K Arora and another on 'Protect Your Heart' by Prof. S. Dwivedi was organized for Himachal Futuristic Communications Limited (HFCL), India in the Board Room of the National Heart Institute at 11-1PM. Both talks were well received by HFCL staff. The core talks were followed by intensive question answer session. BCLT interns from Jamia Hamdard University and Jamia Millia Islamia were also present during this webinar at NHI (Pic. 9)



9. Webinar on Heart Health at NHI. Brigadier Y.K. Arora and Prof. S. Dwivedi along with Jamia Hamdard and JMI Interns

**7. School Health Lectures – ‘मिशन सुहृदयम’ :** A series of following school health lectures were held during world Heart Day Celebrations:

**(A). A talk on Healthy Heart in a Healthy Body (‘उत्तम सेहत उत्तम हृदय’)** was delivered at Swami Vivekanand Bal Bharti School, Madangir on 30th September 2023. Students of class 5th and 6th class and a few of their parents were present on this occasion. Health Posters, charts, and models were used during the lecture. These charts were prepared by enthusiastic interns (Miss Bhoomi, Miss Rimsha & Miss Shaheen) of the Jamia Hamdard posted at NHI. (Pic. 10)



10. School Health Lecture at SVBB School

**(B). A lecture on ‘Healthy Lifestyle’** was organized on 9th October, 2023 delivered at DDU Kaushal Vikas Kendra of Jamia Millia Islamia. Dr. S Dwivedi, Senior Consultant Cardiologist & Head Academics, NHI delivered this talk and interacted with students and faculty of the Kaushal Vikas Kendra staff of the Jamia Millia Islamia.

Undergraduate students of Medical Electrophysiology (MEP) were present in the lecture. MEP students put up several searching questions after the lecture (Picture -11).



11. Lecture on Healthy Lifestyle at JMI

(C). Another talk on 'Healthy Lifestyle for Healthy Heart' was delivered by Prof. S Dwivedi at New Green Field School on 10th October 2023. About 100 students of class 9th and 10th along with some of their teachers participated in this interactive session. The talk was received with great enthusiasm and interest as was evident by the joyous expressions of students and faculty. (Pic. 12)



12. Talk on Healthy Lifestyle for Healthy Heart at New Green Field School

**Postscript:** As mentioned in our opening remarks that NHI/AIHF is committed for keeping every heart healthy by creating awareness among the masses. We at NHI tried to do this by organizing several health camps at different part of the country and sensitizing young minds at different schools by its School Health Lectures on this World Heart Day 2023.

## Health Tips for Winter Season

As the winter season emerges, the likelihood of infection rises. In practically every home, viral infection becomes an issue. Therefore it is necessary to remain vigilant in cold weather. These suggestions can be useful if you're looking for a remedy that won't lead to issues like a cold, cough, fever, or other ailments. Now if you remember a few things, you can take advantage of the cold weather without getting sick. Here are some useful health tips to protect yourself in winter:

- Avoid frequent meals.
- Keep the body protected and warm.
- Drink more water.
- Diet rich in Omega-3 fatty acids.



Have food rich  
in Vitamin C



Keep yourself  
warm



Exercise



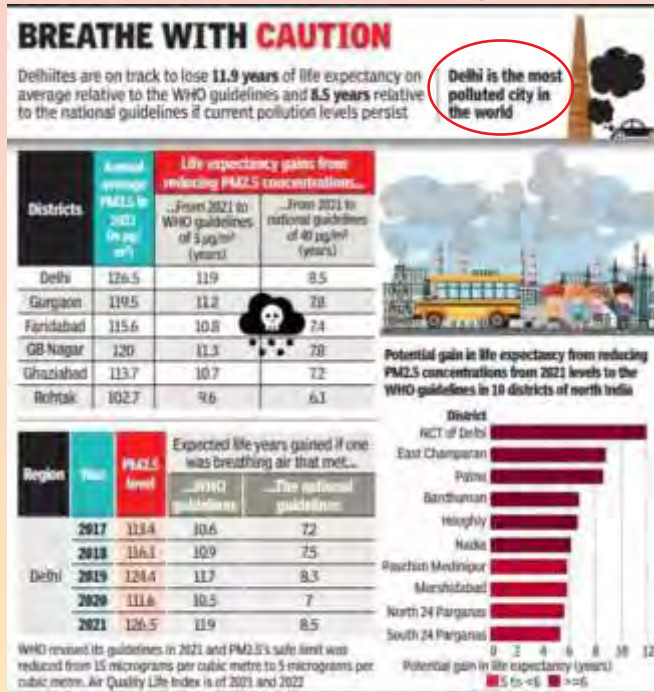
Stay hydrated



Be extra cautious  
if you have allergies

# Air Pollution and Cardiovascular Disease

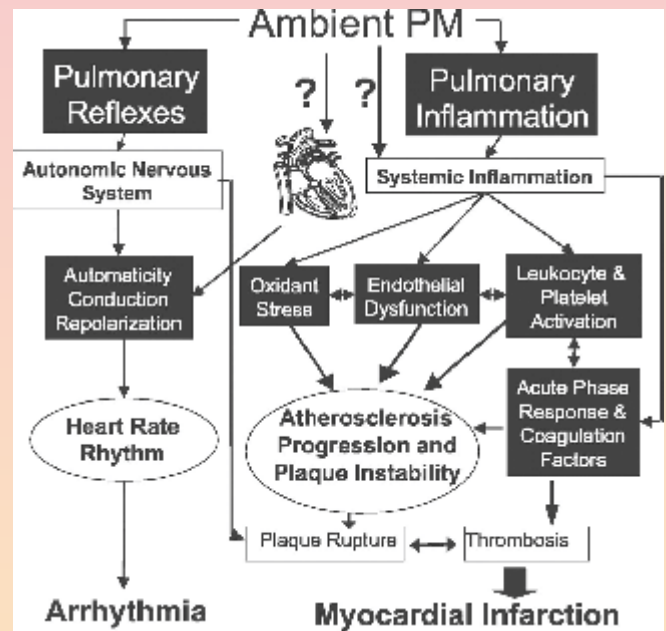
Air pollution is shortening lives by 11.9 years in Delhi, revealed a report on Air Quality Life Index (AQLI) released on August 29<sup>th</sup>, 2023 (Tuesday) in TOI by Energy Policy Institute at University of Chicago. A newspaper clipping analyses the air pollution in various regions of Delhi-NCR and cautions about the health issues arising of it.



Pulmonologist across the city have warned that no amount of air pollution is safe and prolonged exposure to it can exacerbate asthma and bronchitis and reduce lung function over time but few of them talk about the effects on the cardiovascular system.

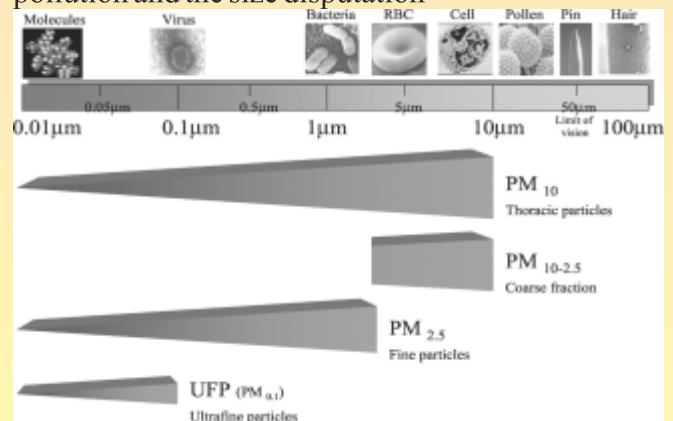
Air pollution is a heterogeneous, complex mixture of gases, liquids, and particulate matter. Epidemiological studies have demonstrated a consistent increased risk for cardiovascular events in relation to both short- and long-term exposure to present-day concentrations of ambient particulate matter. Several plausible mechanistic pathways have been described, including enhanced coagulation/thrombosis, a propensity for arrhythmias, acute arterial vasoconstriction, systemic inflammatory responses, and the chronic promotion of atherosclerosis. Over the last decade, however, a growing body of epidemiological and clinical evidence has led to a heightened concern about the potential deleterious effects of ambient air pollution on health and its relation to heart disease and stroke.

A diagram shows the possible biological mechanism linking PM with cardiovascular disease-



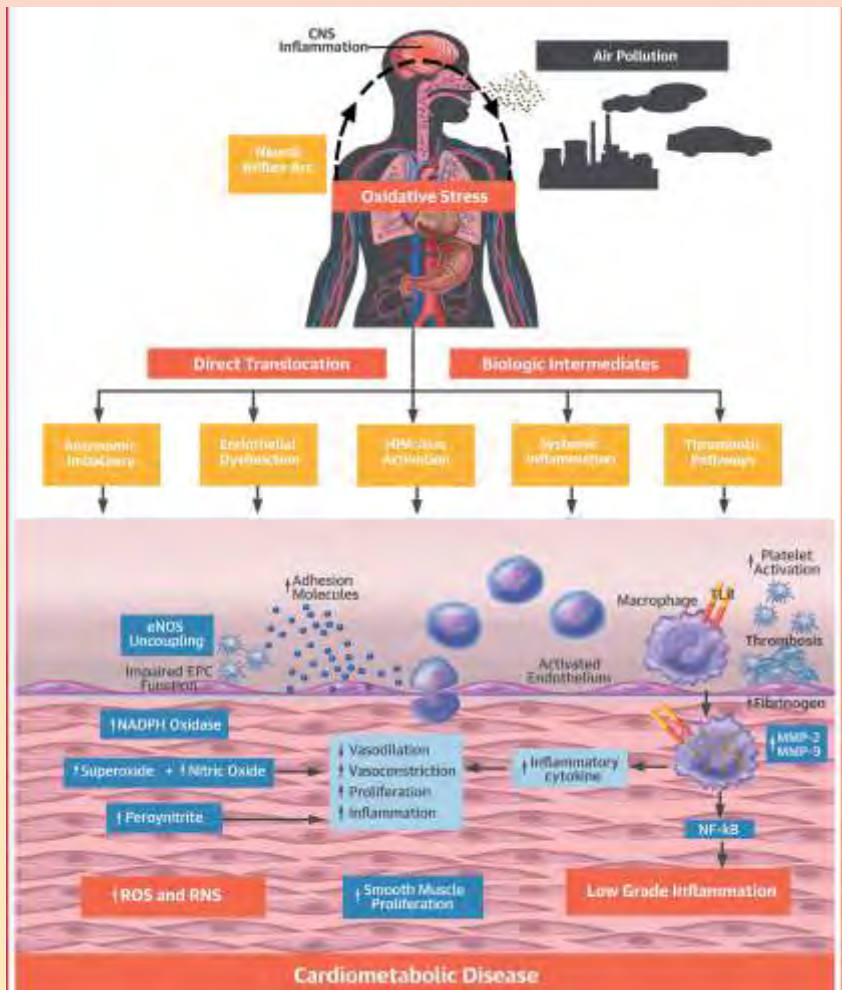
Of special interest are several environmental air pollutants that include carbon monoxide, oxides of nitrogen, sulfur dioxide, ozone, lead, and particulate matter (“thoracic particles” [PM10] in aerodynamic diameter, “fine particles” [PM2.5] and “coarse particles” [PM10 to 2.5].

The diagram shows the particulate matter in air pollution and the size disputation-



These pollutants are associated with increased hospitalization and mortality due to cardiovascular disease, especially in persons with congestive heart failure, frequent arrhythmias, or both. The well-established causal associations between active and passive smoking with heart disease and stroke support the plausibility of an adverse effect of PM on the cardiovascular system.

A self-explanatory illustration of the biological pathways where by PM 2.5 prompts cardiovascular events. →



The potential gain in life expectancy and to help breathe easy with reduction in cardiovascular events few necessary steps are taken which includes-

**Personal- and Local-Level Interventions to Reduce Exposures or Susceptibility to Air Pollution**

This is a national challenge and political will is necessary to counter the deleterious effects of air pollutants.

SOCIETAL AND GOVERNMENTAL INTERVENTIONS	Shifting to Clean Fuels	• Switch coal-fired power plants to low-polluting renewable energy sources such as wind, tidal, geothermal, and solar.
	Transportation Reform	• Promote use of low-emission and zero-emission vehicles, Reduce sulfur content of motor-fuels, Restrict trucks from city centers, encourage active transport (walking and cycling)
	Reduce Traffic Emission(s)	• Diesel particle traps, catalytic converters, alternative fuels (natural gas, electric cars)
	Urban landscape reform	• Land use assessment, minimum distances between sources and people, relocation of traffic sources (including major trafficked roads), avoidance of mixed-use areas (industrial-residential)
	Emission Trading Programs	• Revenues raised through taxes can be directed to pollution control, Emissions trading programs compensate companies who adhere to controls through credits that can be traded akin to carbon credits
	Redirection of science and funding	• Modifying priorities of climate change mitigation investments to a focus on near-term health co-benefits. Focus on the imminent near term danger of health effects of air pollution.
	Empowering civil society	• Publicity and awareness campaigns through local data on air pollution within cities, counties
	Governmental and NGO-led publicity	• Hard-hitting media campaigns akin to smoking on media to mitigate lobbying by industries involved in power and automobiles
PERSONAL INTERVENTIONS	Face masks and Air purifiers	• Wearing face masks and installing air purifiers in homes
	Reduce in-traffic exposures	• Avoid commutes during rush hour
	Reduce in-home penetration of outdoor air pollution	• Indoor air purifiers and closing windows; Air conditioners
	Lifestyle changes and Preventive Medicine	• Exercise and healthy diet • Preventive medications and screening programs

**Dr. Arvind Prakash**  
Sr. Consultant & HOD (Dept. of Cardiac Anesthesiology)

# EVERYTHING YOU NEED TO KNOW ABOUT ANXIETY

## What is anxiety?

Anxiety is your body's natural response to stress. It's a feeling of fear or apprehension about what's to come. For example, going to a job interview or giving a speech on the first day of school may cause some people to feel fearful and nervous.

But if your feelings of anxiety are extreme, last for at least 6 months, and are interfering with your life, you may have an anxiety disorder.

## What are anxiety disorders?

It's normal to feel anxious about moving to a new place, starting a new job, or taking a test. This type of anxiety is unpleasant, but it may motivate you to work harder and do a better job. Ordinary anxiety is a feeling that comes and goes but doesn't interfere with your everyday life.

In the case of an anxiety disorder, the feeling of fear may be with you all the time. It's intense and sometimes debilitating.

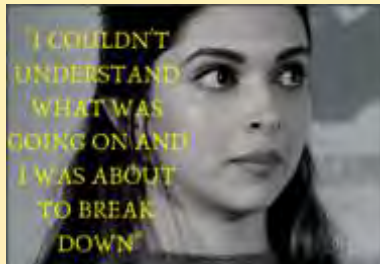
This type of anxiety may cause you to stop doing things you enjoy. For example, it may prevent you from entering an elevator, crossing the street, or even leaving your home in extreme cases. If left untreated, the anxiety will keep getting worse.

Anxiety disorders are the most common form of emotional disorder and can affect anyone. But, according to the American Psychiatric Association, women are more likely than men to receive a diagnosis of an anxiety disorder.

## What are the types of anxiety disorders?

Anxiety is a vital part of several different disorders. These include:

- Panic disorder. This means you experience recurring panic attacks at unexpected times.
- Phobia. This is an excessive fear of a specific object, situation, or activity.
- Social anxiety disorder. This is an extreme fear of being judged by others in social situations.
- Obsessive-compulsive disorder. This means you have recurring irrational thoughts that lead you to perform specific, repeated behaviors.
- Separation anxiety disorder. This means you have a fear of being away from home or your loved ones.
- Illness anxiety disorder. This is anxiety about your health (formerly called hypochondria). In addition, a number of mental health and medical conditions may feature anxiety as a symptom. These include:
  - Post-traumatic stress disorder (PTSD). This is anxiety following a traumatic event.
  - Major depressive disorders. A strong relationship exists between depression and anxiety.
  - Chronic disease. Managing conditions such as chronic obstructive pulmonary disease (COPD) and diabetes may result in anxiety symptoms.
  - Inflammatory conditions. Anxiety can lead to chronic inflammation and diseases such as arthritis
  - Substance use disorders: many people with anxiety may try to self-medicate to help manage their symptoms.
  - Chronic pain. Anxiety is often source in those with chronic pain disorders



## What are the symptoms of anxiety?

Anxiety feels different depending on the person experiencing it. Feelings can range from butterflies in your stomach to a racing heart. You might feel out of control like there's a disconnect between your mind and body.

You may have a general feeling of fear and worry, or you may fear a specific place or event. In some cases, you may experience a panic attack.

### Symptoms Trusted Source of anxiety can include:

- Anxious thoughts or beliefs that are difficult to control
- Restlessness
- Trouble concentrating
- Difficulty falling asleep
- Fatigue
- Irritability
- Unexplained aches and pains

Your anxiety symptoms might be different from someone else's. That's why it's essential to know how anxiety can present itself. Read about the many types of anxiety symptoms you might experience.

## What is a panic attack?

A panic attack is a feeling of intense fear that comes on suddenly and peaks within 10 to 20 minutes. The initial trigger of the fear can be known or unknown.

The physical symptoms can mimic a heart attack. Once you're experiencing a panic attack, the symptoms may get worse if you believe you may be having a heart attack or having a mental health emergency. Another common fear that may exacerbate a panic attack is the fear that you might be judged negatively if you're having an attack in public.

Panic attacks can vary greatly, and symptoms may differ among individuals. In addition, the many symptoms of anxiety don't happen to everyone, and they can change over time.

### Common symptoms Trusted Source of a panic attack include:

- Chest pain
- Feeling of choking
- Fear of losing control
- Feeling of impending doom
- Sweating, chills, and hot flashes
- Shaking
- Numbness and tingling of hands, feet, or face
- Nausea or upset stomach
- Shortness of breath
- Fear of dying

When you experience repeated panic or anxiety attacks, you may have a panic disorder.

## What causes anxiety?

Experts aren't sure of the exact cause of anxiety. But it's likely that a combination of factors play a role.

### The causes of anxiety may include:

- Stress
- Other medical issues such as depression or diabetes
- First degree relatives with generalized anxiety disorder
- Environmental concerns, such as child abuse
- Substance use
- Situations such as surgery or occupational hazard

In addition, researchers believe that it stems from the areas of the brain responsible for controlling fear and the storing and retrieval of emotional and fear-related memories.

### What natural remedies are used for anxiety?

Lifestyle changes can effectively relieve some of the stress and anxiety you may cope with every day. Most natural “remedies” consist of caring for your body and participating in healthy activities while eliminating unhealthy ones.

These include:

- Getting enough sleep
- Meditating
- Staying active and exercising
- Eating a healthy diet
- Avoiding alcohol
- Avoiding caffeine

quitting smoking cigarettes

- If you smoke

If these lifestyle changes seem like a positive way to help you eliminate some anxiety, read about how each one works—plus, get more great ideas for treating anxiety.

### Anxiety and depression

If you have an anxiety disorder, you may also be experiencing depression. While anxiety and depression can occur separately, it's not unusual for mental health disorders to happen together.

Anxiety can be a symptom of clinical or major depression. Likewise, worsening symptoms of depression can become triggered by an anxiety disorder.

You can manage symptoms of both conditions with many of the same treatments: psychotherapy (counseling), medications, and lifestyle changes.

How to help children with anxiety

Anxiety in children is natural and expected. According to the Centers for Disease Control and Prevention (CDC), 9.4% Trusted Source of children and adolescents ages 3 to 17 have had a diagnosis of anxiety.

As children grow up, they should outgrow the worries and fears they felt when they were younger. It may be considered an anxiety disorder if they're afraid to be away from their parents, exhibit extreme fear, and other anxiety symptoms that interfere with their day-to-day lives.

Anxiety in children can also become chronic and persistent, with uncontrolled anxiety leading them to avoid interacting with their peers or family members.

### Symptoms of an anxiety disorder Trusted Source in children might include:

- Anger
- Irritability
- Trouble sleeping
- Feelings of fear
- Fatigue
- Headaches
- Stomachaches

Anxiety treatment for children includes cognitive behavioral therapy (talk therapy) and medications. Learn more about the symptoms of an anxiety disorder and techniques to help calm your child's anxiety.

### How to help teens with anxiety?

Teenagers may have many reasons to be anxious. Tests, college visits, and first dates all pop up in these important years. But teenagers who feel anxious or experience anxiety symptoms frequently may have an anxiety disorder.

Symptoms of anxiety in teenagers may include nervousness, shyness, isolationist behaviors, and avoidance. Likewise, anxiety in teens may lead to unusual behaviors.

For example, they may act out, perform poorly in school, skip social events, and even engage in substance or alcohol use.

In some teens, depression may accompany anxiety. Diagnosing both conditions is essential so that their treatment can address the underlying issues and help relieve symptoms.

The most common treatments for anxiety in teenagers are talk therapy and medication. These treatments also help address depression symptoms.

### Anxiety and stress

Stress and anxiety are related but different. Stress is a typical and healthy reaction to an identifiable event that's making you nervous, such as an upcoming test, presentation, wedding, or other major change in your life.

Stress will go away once the trigger goes away. Anxiety, on the other hand, persists beyond any trigger and may exist without a known trigger. A person may need treatment for anxiety to go away.

Both anxiety and stress respond well to physical activity, good sleep hygiene, and a well-balanced diet. But if your anxiety and stress don't respond well and you feel your day-to-day functioning is impaired, a mental health professional can help you determine a treatment plan.

### Physical symptoms of anxiety

When you experience symptoms of anxiety, they can manifest as physical symptoms such as:

- Dizziness
- Tiredness
- Heart palpitations
- Muscle aches and tensions
- Shaking
- Dry mouth
- Excessive sweating
- Stomachache
- Headache
- Insomnia

Neither stress nor anxiety is always bad. Both can provide you with a boost or incentive to accomplish the task or challenge before you. But if these feelings become persistent, they can begin to interfere with your daily life. In that case, it's important to get treatment.

The long-term outlook for people with untreated depression and anxiety includes chronic health issues, such as heart disease. Learn why anxiety and stress occur and how you can manage the conditions.

### Anxiety and alcohol

If you're anxious frequently, you may decide you'd like a drink to calm your nerves. After all, alcohol is a sedative. In addition, it can depress the activity of your central nervous system, which may help you feel more relaxed.

Some people with anxiety disorders abuse alcohol or other drugs regularly to feel better, creating dependency and addiction.

It may be necessary to treat an alcohol or drug problem before doctors can address the anxiety. But chronic or long-term use can ultimately worsen the condition. Read more to understand how alcohol can worsen anxiety symptoms.

### Can foods treat anxiety?

Doctors commonly use medication and talk therapy to treat anxiety. But lifestyle changes, such as getting enough sleep and regular exercise, can also help. In addition, some research suggests the foods you eat may have a beneficial impact on your brain if you frequently experience anxiety.

### These foods include:

- Flax and chia seeds
- Fatty fish such as mackerel and salmon
- Turmeric
- Vitamin D
- Magnesium
- Tryptophan

## Anxiety prevention/ Children and teens

It's not known why anxiety develops in children and teenagers. But there are excellent public health approaches that work to prevent the disorder, and they include:

- Suicide prevention
- Bullying prevention
- Youth violence prevention
- Child maltreatment prevention
- Mental health programs

As parents, you can communicate openly and honestly with your child while ensuring they're making healthy decisions.

To learn more about how to support your child's mental health, please check out the Centers for Disease Control and Prevention (CDC) resource page Trusted Source.

In addition, in cases of children and teens experiencing anxiety in response to something happening within their family or in their home, it's a good idea to get family therapy. This is important especially because children and teens may not find it so easy to talk about their feelings or be aware of their anxiety.

### Adults

There are many ways to prevent anxiety and its symptoms. Please see the below options:

- Avoidance. Avoiding people, places, and situations can lessen your stress and anxiety. But this would be a short-term strategy. In the long term, it's better if you get treatment so you no longer need to avoid a trigger.

- Stress management and mindfulness. Practicing stress management and mindfulness prevents strain.
- Restrict caffeine. Caffeine can worsen anxiety symptoms.
- Support groups. Speaking with others is an opportunity to share coping strategies and experiences.
- Therapy. Speaking with a therapist can help you develop more effective ways to cope with fears and stress that lead to anxiety.
- Speak with a doctor about your medications. Regularly speaking with a doctor about your medications' dosing, effectiveness, and side effects ensures any health condition is treated adequately and monitored for any possible anxiety-related side effects.

### Outlook

You can treat your anxiety with medication, psychotherapy, or a combination of the two.

But some people who have a mild anxiety disorder, or a fear of something they can easily avoid, decide to live with the condition and don't get treatment.

Avoiding the trigger, however, can actually make anxiety worse in the long term. Treatment can help you overcome the need to avoid a trigger.

It's important to understand that anxiety disorders can be treated, even in severe cases. Although anxiety usually doesn't go away, you can learn to manage it and live a happy, healthy life.

By Dr. Adarsh Kumar  
Senior Consultant Internal Medicine



# Mangalyaan

Sharing my composition on Mangalyaan written on 27th December 2014 (Available on my Facebook)

Twenty fourteen brought many cheers saw successful voyage of 'Mangalyaan' into Martian orbit,  
Yoga getting its due UN declaring Twenty First May as International Yoga Day all globe,  
Manjul Bhargava getting prestigious Math prize crediting Srinivas Ramanujan Sanskrit on his mind,  
Vivek Murthy the youngest Surgeon General of States Indian prodigy making all of us proud I11  
No less was the feat of Arogyaswami Paulraj inventor of wi fi and 4G Marconi award winner Indian navy knight,  
Unassuming home grown our own Kailash Satyarthi co-recipient of Peace Nobel for childhood rights,  
Back home mandate of democracy victory of ballot over bullet all across India north south east west,  
Launching of 'Clean India' campaign kindling hopes in billion Indian hearts for a better healthy life I21  
Pledge for clean Ganges restoring Yamuna to its pristine purity ensuring their sacred impact on our psyche,  
Wish twenty fifteen dream of corruption free tobacco free India comes true does not remain a distant far cry,  
Promise for development irrespective of class creed or color brings fruits all round translates into reality,  
Not confined to privilege few nearer to corridor power brokers middlemen fleecing leech of society I31  
Come what way no divisions no chasm no conflicts in the name of religion faith sect or community,  
Science engineering technology humanity spirituality making inroads in each school college university,  
A big no to terror set aside all such nonsense in the garb of fanaticism radicalism of any kind or so called 'liberty',  
Dialogue tranquility the cornerstone of prosperity progress growth in all field spreads far wide city or county I41  
Our quest for peace and development dawns upon every nook and corner of SAARC neighborhood,  
Each country flourishes mountains do not perish forests intact precious flora and fauna preserved,  
No one remains hungry without a roof or shelter in shackles of ill health ray of education permeating each mind,  
Every Indian holding his head high with sense of fulfilment tricolor fluttering great heights unhindered I5),  
My God so be the year ahead for my dear country,  
My fellow citizens Jai Hind Jai Hind and Jai Hind I61



## कालखंड 1940-2023: देश की सेहत का परिदृश्य

**भूमिका :** आजादी मिलने के पूर्व अर्थात् १९४० के दशक में कुपोषण, शारीरिक स्वच्छता और समुचित स्वास्थ्य सेवा के अभाव में प्रतिवर्ष असंख्य लोग चेचक, हैजा, ताऊन (प्लेग), टिटनेस, टाइफॉइड, डिप्थीरिया और टी बी जैसी संक्रामक बीमारियों के कारण मृत्यु को प्राप्त हो जाते थे। स्वतंत्रता के बाद जैसे जैसे हमारी आर्थिक उन्नति होती गई और सामुदायिक स्वास्थ्य सेवा का विस्तार होता गया, आहार पुष्टिकर हुआ, टीकाकरण नियमित होने लगा तबसे धीरे धीरे करके बहुत सी संक्रामक बीमारियाँ खत्म होती गईं परंतु आर्थिक समृद्धि अपने साथ जीवन शैली संबंधी अनेक खराबियाँ भी लायीं जैसे फैशन के रूप में तंबाकू-धूम्रपान, जंक भोजन का प्रचलन, व्यायाम से अरुचि, तनाव, मोबाइल का अतिशय प्रयोग और देर रात तक काम करने की प्रवृत्ति। स्वास्थ्य की दृष्टि से इन विनाशकारी आदतों के चलते हमारे देश में भी नई नई प्रकार की महामारी का उदय हुआ। इन बीमारियों को हम असंक्रामक बीमारियाँ कहते हैं। इनमें सर्वप्रमुख हैं-उच्चब्लड प्रेशर, डायबिटीज, हृदयरोग, सांस-खांसी और मुख कैंसर। तत्कालीन और वर्तमान स्वास्थ्य परिस्थितियों का चित्रण करती प्रस्तुत है अधोलिखित कविता-सेहत का परिदृश्य:



स्वतंत्रता पूर्व हैजा-ताऊन,  
पूरे गाँव में दहशत कंपन,  
पैदा कर देती थी,  
लोग खेतों खलिहानों में छिप कर,  
मायके-ननिहाल की शरण लेकर,  
प्राण बचाते थे।  
कौन भूल सकता है,  
तपेदिक की वह मार,  
जिसने हमसे मुंशी प्रेमचंद,  
महाकवि प्रसाद दोनों छीन लिए।  
मैंने वह काल भी देखा है,  
जब तत्कालीन वेलिंगटन में,  
प्रोस्टेट आपरेशन के बाद,  
लोहिया मूत्र संक्रमण से,  
एम्पिसिलीन के अभाव में,  
स्वर्ग सिधार गए।  
प्रज्ञा के युवा संपादक,  
चेचक के भयंकर रक्तस्राव से,  
युवा पत्नी और अंकस्थ शिशु को,  
अकेला विलखता छोड़ कर,  
परलोक गमन कर गए।

मेरे चिकित्सक मित्र की भाभी,  
अपने नवजात शिशु को छोड़,  
टेटनस के धनुष-टंकार में,  
थक कर महायात्रा पर चली गयी।  
मुझे अभी तक याद है,  
उस प्रौढ़ की वह लाठी,  
जिसके सहारे वह,  
सरसुंदरलाल की ओ पी डी में,  
लतरी दाल के चलते,  
अपनी पंगुता की व्यथा,  
निर्धनता और सूखे की,  
कहानी सुनाने आया था।  
अभी पिछले वर्ष ही,  
कोविड महामारी में,  
असमय में न जाने कितने,  
काल कवलित हो गये।  
अब वह भी एक समय है,  
जब भारत दवाइयाँ,  
बनाने में अब्वल नंबर पर है,  
कोविड के विरुद्ध टीका,  
ईजाद हो चुका है,  
चेचक उन्मूलित टेटनस ओझल है।

भारत के सफलता की पटकथा,  
चंद्रयान तीन चंद्रमा की कक्षा में,  
प्रविष्ट कर उस पर अवतरण की,  
नौकायन की तैयारी कर रहा है।  
इस सफलता के अतिरिक्त,  
इसका कृष्ण पक्ष भी है,  
जीवन रेखा जरूर बढ़ी है,  
संपन्नता के साथ साथ,  
कदाचार का ग्राफ भी बढ़ा है,  
बुरे खानपान रहन सहन से,  
अल्पायु में ही लोग,  
उच्च ब्लड प्रेशर डायबिटीज,  
सांस खांसी हृदयाघात कैंसर,  
जीवन शैली बीमारियों से,  
ग्रस्त बुरी तरह जूझ रहे हैं।  
तुलसी बाबा इसीलिए लिख गये हैं,  
'कर्म प्रधान विश्व रचि राखा,  
जो जसि करई सो तस फल चाखा',  
इसी बात को कबीर कहते हैं,  
कर्म गति टारे न टरे,  
सेहत का यही शास्वत सत्य है।



**संकेत:** हैजा-ताऊन मतलब कालरा-प्लेग, वेलिंगटन-दिल्ली का वेलिंगटन अस्पताल जिसे स्वर्गीय डाक्टर राम मनोहर लोहिया की स्मृति में अब राम मनोहर लोहिया अस्पताल कहते हैं, प्रज्ञा-काशी हिन्दू विश्वविद्यालय का रिसर्च जर्नल, लतरी-खेसारी की दाल जो सूखे में भी उग जाती है। इसके खाने से दोनो पैर पंगु हों जाते हैं। इस रोग को लेथरिज्म (कलाय खंज) कहते हैं।  
**जीवन शैली की बीमारियाँ-** खराब जीवन शैली-तंबाकू-धूम्रपान, जंक भोजन, व्यायामहीनता, आपाधापी तथा देर रात सोने-जगने के कारण कम उम्र में डायबिटीज, ब्लड प्रेशर, हार्ट अटैक, कैंसर की बीमारी।

डाक्टर श्रीधर द्विवेदी

वरिष्ठ हृदय रोग विशेषज्ञ, नेशनल हार्ट इंस्टिट्यूट, नई दिल्ली

## बढ़ती उम्र में कब्ज की समस्या



साठ-बासठ के आस पास जब लोग सक्रिय सेवा से निवृत्त हो जाते हैं और बच्चे घर का कारोबार, खेती-बाड़ी पूरी तरह से सम्भाल लेते हैं या और घर में बहुत काम-धंधा देखने लगती है तो ऐसी स्थिति में बड़े-बूढ़ों

को यह अहसास होने लगता है कि अब चलते समय उनकी टांगों में पहले जैसी तेजी नहीं रह गयी है और घुटने कमजोर से हो गए हैं। दृष्टि कम हो रही है। दाँत जर्जर हो गये हैं। कब्ज रहता है। पेट साफ नहीं होता। शौचालय में देर तक बैठना पड़ता है फिर भी मल नहीं उतरता है। पेशाब की धार कम हो गयी है। गदूद (प्रोस्टेट) तंग करने लगा है। मूत्र में बार-बार जलन-संक्रमण (इन्फेक्शन) होने लगा है। चलते समय अक्सर चक्कर आता है। गरदन की हड्डियाँ (सर्वाइकल स्पाइन) ढीली पड़ गयी हैं अत्यवस्थित हो गयी हैं और गर्दन की धमनियों पर दबाव डाल रही हैं जिसके चलते मस्तिष्क को खून मिलने में बाधा पड़ती है और चक्कर, घुमरी आती है। अब कमर और बाजू में भी अक्सर दर्द रहता है। कभी कभी तीव्र हो जाता है।

इस उम्र में चलने की रफ्तार तथा घुटनों की समस्या के अतिरिक्त शरीर के अन्य भागों में भी कई तरह की मुसीबतें घेर लेती हैं। ये वे शिकायतें होती हैं जो पहले भी थोड़ी बहुत थी पर काम के बोझ के चलते उतनी अनुभव नहीं होती थी, दबी हुयी थी पर अब जब खाली बैठे हैं, घर में हैं, एकाकी जीवन में परेशानियाँ ज्यादा बढ़ती दिखाई देती हैं। एक मुसीबत हो तो उससे निपटा जा सकता है पर जब कब्ज, पेशाब में जलन, घुटनों-कमर में दर्द सब एक साथ आपको घेर लें तो सामान्य जीवन दूबर हो जाता है। इन बीमारियों (कब्ज, पेशाब का कष्ट, घुटने-कमर का दर्द) का चक्रव्यूह ऐसा है कि आप ज्यादा चल नहीं सकते। घूमने-टहलने जा नहीं सकते। ये शिकायतें सुनने में तो साधारण सी लगती है परन्तु बढ़ती उम्र में जीवन की गुणवत्ता पर बहुत असर डालती हैं। मन के अंदर उत्साह, ऊर्जा और आनंद को प्रभावित करती हैं।

आइयें एक दृष्टि डालते हैं कौन हैं वे समस्यायें जो जीवन की संध्या में मन खट्टा करती हैं :

१. पेट साफ न होना / कब्ज

२. मूत्र-पथ में बहुधा संक्रमण होना / गदूद (प्रोस्टेट) वृद्धि
३. जोड़ों में दर्द-विशेषतः कमर, गर्दन और दोनों या एक घुटने में दर्द
४. उच्च रक्तचाप / हाइपरटेंशन
५. मधुमेह / डायबिटीज
६. हृदयाघात / हृदय सम्बन्धी रोग
७. पक्षाघात / लकवा
८. सांस-खांसी
९. विविध कैंसर-पुरुषों में फेफड़े / प्रोस्टेट / मुख कैंसर और महिलाओं में स्तन / गर्भाशय / गर्भाशय-ग्रीवा कैंसर
१०. अवसाद / स्मृति हास / डिप्रेशन
११. श्रवण, दृष्टि, दन्त संबंधी रोग

एक और बात जो बहुत महत्वपूर्ण है - वह यह कि इन मुसीबतों के अतिरिक्त कुछ और बीमारियाँ जैसे उच्चरक्तचाप, डायबिटीज, हृदयाघात, कैंसर, पेट में घाव / अल्सर या कोई और व्याधि जो सेवानवृत्ति के पहले से ही थी उसके लिए इलाज, जांच-पड़ताल तो चल रही थी। दिन भर में चार-पांच दवाईयाँ रोज खानी पड़ती थी लेकिन अब उम्र ढलने के साथ साथ जब ये नई मुसीबतें भी खड़ी हो गयीं हैं। प्रश्न यह है कि कब्ज, पेशाब की शिकायत, जोड़ों में दर्द, घुटनों की तकलीफ के पीछे का मुख्य कारण क्या है और उनका समाधान क्या है? ध्यान से देखने पर ये समस्त लक्षण हमारी खराब जीवन शैली से संबंधित है। ऐसी जीवन शैली जो किशोरावस्था से प्रारम्भ हुई और युवावस्था पार कर प्रौढ़ होने तक चलती रही। पहले तो शरीर ने किसी प्रकार उसको सहन किया पर समय बीतने के साथ साथ विभिन्न अंगों के कल-पुर्जे घिसते गए, उसमें सूजन-दाह-प्रदाह (जलन) होने लगे, उनकी झिल्लियों के ऊपर घाव होने लगा, उनके ऊपर विजातीय द्रव्य (साइटोकाइन, कोलेस्टेरोल) इकट्ठा होने लगे। लगातार टूट-फूट और प्रदाह के कारण शरीर के विभिन्न अंग जैसे बड़ी आंत, मल-पथ, मूत्र पथ, हड्डियों के जोड़ अब जवाब देने लगते हैं। बड़ी आंत से मल निकलने की प्रक्रिया शिथिल पड़ जाती है। प्रोस्टेट वृद्धि के कारण मूत्र पथ में अवरोध होने लगता है जिसके कारण उसमें अक्सर संक्रमण की शिकायत होने लगती है। ध्यान से देखने पर इनमें से अधिकांश लक्षण हमारी खराब जीवन शैली से संबंधित है। ऐसी जीवन शैली जो किशोरावस्था से प्रारम्भ हुई और युवावस्था पार कर प्रौढ़ होने तक चलती रही। पहले तो शरीर ने किसी प्रकार उसको सहन

क्रिया पर समय बीतने के साथ साथ विभिन्न अंगों के कल-पुर्जे घिसते गए, उसमें सूजन-दाह-प्रदाह होने लगे, झिल्लियों के ऊपर घाव होने लगा, उनके ऊपर विजातीय द्रव्य (साइटोकाइन, कोलेस्टेरोल) इकट्ठा होने लगे। लगातार टूट-फूट और प्रदाह के कारण शरीर के विभिन्न अंग जैसे बड़ी आंत, मल-पथ, मूत्र पथ, हड्डियों के जोड़ अब जवाब देने लगे। बड़ी आंत से मल निकलने की प्रक्रिया शिथिल पड़ गयी। मूत्र पथ में अवरोध होने लगा जिसके कारण उसमें अक्सर संक्रमण की शिकायत होने लगी। जोड़ अब वजन न समाल सकते थे। जरा सा भर पड़ने पर लचक जाते। अब उन्हें सहारे-छड़ी या पहियेदार कुर्सी की जरूरत महसूस होने लगी। फल यह हुआ कि कब्ज आम बात हो गयी। वैसे भी कब्ज पेशाब का कष्ट, प्रोस्टेट की तकलीफ दोनों आपस में गुथी हुई प्रतीत होती है। यह बहुत बड़ी मानसिक वेदना की बात होती है कि मल पेट में भरा हुआ है पर बाहर नहीं निकलता। ऐसा लगता है कि मैले-कचरे का अम्बार कोलन में इकट्ठा कर आदमी चल रहा है। एकत्रित मल से उत्पन्न सड़ांध और हानिकारक जीवाणु अगल-बगल के अंगों विशेषतः जिगर (यकृत) को दुष्प्रभावित करते रहते हैं। कब्ज में पेट पर जोर लगाना पड़ता है ताकि कोलन में जमा मल आगे निकल सके और पेट पर जोर लगने से प्रोस्टेट पर दबाव पड़ता है और वह

मूत्र पथ का रास्ता रोक लेती है। बहुत प्रयास के बाद भी जब मल बाहर नहीं निकलता तो कुछ लोग तरह तरह की दवाइयों का सहारा लेते हैं। एनिमा लगाते हैं। थक कर अपनी अंगुली से गुदाशय से मल के सुदों को बाहर निकलते हैं। यह स्थिति इसलिए आती है हमारा खान पान वर्षों से बिगड़ गया है। जंक खाना, भोजन में रेशे की कमी, फल-सब्जी का अभाव तथा शरीर में कमी, अनियमित समय पर सोना-जगना, लम्बे समय की डायबिटीज, थायरायड की अक्षमता, दवाइयों का दुष्प्रभाव, चलने-फिरने का संकट ये सब मिल कर बड़ी आँतों की मांस-पेशियों की सक्रियता कम कर देती है जिससे मल आगे बढ़ नहीं पाता और सूख कर सुदे का रूप ले लेता है। बड़ी आँतों की सक्रियता बनाये रखने के लिए नियमित घूमना, फल और रेशेदार सब्जियों का भोजन, मैदे तथा जंक भोजन से परहेज, पर्याप्त पानी का सेवन और समय पर शौच की आदत डालनी चाहिये।

डाक्टर श्रीधर द्विवेदी  
वरिष्ठ हृदय रोग विशेषज्ञ,  
नेशनल हार्ट इंस्टिट्यूट, नई दिल्ली

सदाबहार हूँ मैं  
सदपुष्पा सदासुहागन हूँ,  
नन्हा सा पौधा हूँ,  
एशिया अफ्रीका सर्वसुलभ हूँ मैं । सदाबहार हूँ मैं ।।  
हर मौसम में उत्फुल्ल,  
लाल धवल दोनों हूँ,  
छोटा समझने की भूल न करो,  
'सतसैय्या के दोहरों' की तरह,  
आपके बड़े काम का हूँ मैं । सदाबहार हूँ मैं ।। 2।  
शताधिक एलकलाऑयड,  
फलएवोनोयड रसायन,  
शक्कर बी पी की,  
काट हूँ मैं । सदाबहार हूँ मैं ।। 3।  
मेरे अन्य अवयव,  
विनब्लास्टीन विनक्रिस्टीन,  
कैंसर की मुफीद दवा,  
कितनी गुणकारी हूँ मैं । सदाबहार हूँ मैं ।। 4।



डाक्टर श्रीधर द्विवेदी  
वरिष्ठ हृदय रोग विशेषज्ञ,  
नेशनल हार्ट इंस्टिट्यूट, नई दिल्ली



# सैर पथ में योग और भोग

सबेरे सबेरे सैर पथ में कुछ ऐसे लोगों से भेंट होती है जो मन में सहज ही ऊर्जा-उत्साह का संचार करते हैं। ऐसे ही कुछ महानुभावों का विवरण:

- (१) पसीने से लथपथ तेज गति से चलते एक अधेड़। उनके ओठों पर भगवान का नाम ८ भक्ति और योग का अद्भुत समन्वय।
- (२) 'ॐ नमः शिवाय' की ध्वनि बिखेरते तेज चाल से चलते ४५-५० वर्ष के सज्जन। उनके चेहरे का आह्लाद देखते ही बनता था। यह भक्ति और व्यायाम का समागम था।
- (३) हाथों में पानी की बोतल, मस्तक पर लाल बंधन, लगाये दौड़ रही एक प्रौढ़। पसीना इनके शरीर से भी चू रहा था। व्यायाम-सेहत के प्रति समर्पित एक महिला।
- (४) तेज गति से चलते एक सज्जन जो मोबाइल पर खेत-खलिहान, कानूनगो, नेताजी, रुपये-पैसे का लेन-देन की चर्चा में व्यस्त थे। बातचीत के लहजे से बिहार के लग रहे थे। सैर के साथ साथ घर देहात की ताजा स्थिति पर नजर रखे हुए थे। काश हम सब अपने मूल स्थान से इतनी आत्मीयता बनाये रखत।
- (५) नीम के विशाल वृक्ष के नीचे एक युवा इंजीनियर प्राणायाम की मुद्रा में ध्यान मग्न होकर कपालभाति कर रहे थे। उनके चेहरे पर फैली शांति और सौम्यता देखते ही बनती थी। मैंने उनकी योग-साधना में खलल डालना उचित नहीं समझा और आगे बढ़ गया।

सबेरे के ये पांच दृश्य अच्छे स्वास्थ्य की तरफ बढ़ते हुए कदम थे। ऐसे क्षण मन में सहज ही भक्ति, ऊर्जा और आनंद की अनुभूति करते हैं। हमें उत्तम स्वास्थ्य की तरफ ले जाते हैं। प्रशंसनीय हैं ऐसे लोग।

कुछ दृश्य ऐसे होते हैं जिन्हें देखकर आँखों को असौम्य आनंद मिलता है। चित्त को हर्ष होता है। सबेरे की सैर उन्ही क्षणों में से एक पल है। बाग में किशोरों, जवानों, युवतियों और महिलाओं को भागते दौड़ते और सैर-व्यायाम करते देखना उनको देखने मात्र से अंदर से एक आवाज उठती है-देश में लोग अब अपने स्वास्थ्य के प्रति सचेत हो रहें हैं। जागरूक हो रहें हैं। आज के कुछ वर्षों पहले केवल बूढ़े और रिटायर्ड किस्म के लोग सैर पथ में नजर आते थे। अब नजारा बिलकुल बदल गया है। बगीचे में वृद्ध, युवा, किशोर, कामकाजी महिलायें, युवा दम्पति, युगल, अधेड़ सभी दिखते हैं। मजे की बात यह है उसमें मंद गति से चलने वाले वरिष्ठ, मंथर चाल से बात करते महानुभाव गण, छिप्र गति से हाथों में मोबाइल लिये धावक, मध्यम चाल से चलने वाले अधेड़, कुछ योगासन करते तो कुछ प्राणायाम करते सज्जन वृन्द, कुछ नीम के विशाल पेड़ के नीचे रक्खी बेंच पर बैठ कर गुप्त-गूँ करते लोग। सबेरे खरसबेरे बड़ा ही मनमोहक दृश्य होता है। इनमें से अधिकांश नियमित सैर प्रेमी होते हैं। आमने सामने होने पर मुस्कराते, नमस्कार करते हैं। विशेष स्नेही हाथ मिलाते हैं। जिनमें प्रगाढ़ता होती है वह हाथ मिला कर रुकते हैं, हाल-चाल लेते हैं फिर अपने अपने रास्ते चाल पड़ते हैं। कुछ ऐसे भी होते हैं जिनसे अत्यंत घनिष्ठता होते हैं वह साथ हो लेते हैं। चलते चलते सम सामयिक विषयों पर बात होती है। घर में राजी खुशी दुःख खर्द का आदान प्रदान होता है। डोकलाम में क्या हुआ? कश्मीर में नासूर की भांति फैले आतंकवाद पत्थरबाजों का आगे क्या होगा? गोरखपुर में अनेक मासूमों की मृत्यु की वास्तविकता क्या थी? मणिपुर में इतनी अशांति क्यों है? नई संसद कितनी भव्य है? भारत मंडपम कैसा

विश्वस्तरीय सभागार है / चंद्रयान-३ क्या अपने गंतव्य चर्द्धरा पर सकुशल पहुँच पायेगा? असमय की यह बाढ़ और जलप्रलय कब थमेगा? और हाँ जी-२७ स भारत की प्रतिष्ठा में चार चाँद लगेगा या यह व्यर्थ का तमाशा है? कैसे हम इतने संवेदनहीन, दिशाहीन, और भटक गये लोग हो गये हैं। समाज में निरंतर गिरावट, चाल चलन, प्रचलन का रोना-धोना आदि आदि। बात करते करते सैर पथ की परिक्रमा पूरी हो जाती है। दूधिये का पड़ाव आ जाता है। बगल में फल-सब्जी वालों के रेडियों से कुछ जरूरी खरीद-फरोख्त होती है। उसके बाद दोनों-तीनों लोग अपने अपने घरों की तरफ रवाना हो जाते हैं। यही जीवन धारा का क्रम है।

जिस प्रकार किसी विशाल नदी में बहती हुई दो लकड़ियाँ संयोग वश अचानक एक दूसरे से मिलती हैं, थोड़ी दूर साथ साथ बहती हैं फिर अलग हो जाती है उसी प्रकार हमारा भी सम्मिलन होता है। साथ साथ बहने के वे क्षण कितने अलभ्य कितने आल्हादकारी होते हैं। वे पल वर्णनातीत हैं। प्रवाह में बहने का सुख कुछ और ही है। उसकी बानगी अलग होती है। वह अप्रतिम अनुभव है। वह चाहे जन-प्रवाह हो या जल-प्रवाह।

## हृदय सुहृद सनातन है:

हृदय विशेष प्रकार की मांसपेशियों (हृत्पेशी) से बन हुआ एक शक्तिशाली सचेतन पम्प है। वह बीनइपेवद हीदजम शरीर के सभी अंगों को स्वच्छ खून आपूर्ति करता रहता है। उसके अंदर चार प्रकोष्ठ (कमरें) होते हैं। ऊपर वाले प्रकोष्ठों को अलिंद और उनके ठीक नीचे वाले कमरों को निलय कहते हैं। दाहिने अलिंद में ऊपर की ओर पम्प का मुख्य विद्युत्स्विच होता है जिसे पेस मेकर कहते हैं। हृदय के अंदर रक्त संचरण की ऐसी सटीक व्यवस्था है कि दोनों अलिंद (दाहिने / बायें) अपने कमरे में एकत्रित रक्त को अपने अपने निलय में ही प्रक्षेपित करते हैं। अलिंद और निलय के बीच में सुघड़ कपाटियाँ (वाल्व्स) होती हैं जो एक ही दिशा में अर्थात् अलिंद से निलय की ओर ही खुलते हैं जिससे रक्त संचरण में कोई घालमेल न हो। ऐसी है निसर्ग की उत्कृष्ट व्यवस्था। हमारा काम निसर्ग की इस नजजंड व्यवस्था को सुचारू रूप से चलने देने में केवल सहायता करना मात्र है। अच्छी जीवन शैली अपना कर हम अपने हृदय को यह मदद कर सकते हैं और हृदय को आजीवन स्वस्थ रख सकते हैं।

हृदय सुहृद सनातन है  
हृदय ही जीवन है,  
हृदय स्पंदन है,  
रक्त संचरण है,  
प्राण संदीपन है।  
हृदय ही सेहत है,  
अमूल्य नियामत है,  
सुरक्षित रखे इसे,  
निसर्ग की अमानत है।  
याचना कुछ नहीं भूरी,  
तम्बाकू मदिरा दूरी,

व्यायाम सादा जीवन,  
फल शाकाहारी भोजन।  
धूयें से मलिन न करें।  
नलियां दूषित न करें,  
प्रतिदिन योग ध्यान,  
निर्मल हृत्पिंड करे।  
अलिंद चेतन है,  
निलय निकेतन है,  
जन्म से मृत्यु तक,  
सुहृद सनातन है।

डाक्टर श्रीधर द्विवेदी

वरिष्ठ हृदय रोग विशेषज्ञ, नेशनल हार्ट इंस्टिट्यूट, नई दिल्ली

# स्वास्थ्य संबंधी कुछ नए सुभाषित

## 1. संस्कार और सेहत, सुख-समृद्धि सदा रत ।

किसी व्यक्ति के सुसंस्कार और सुस्वास्थ्य का स्तर उसके सुख और समृद्धि का आधार होता है। व्यक्ति जितना ही सुसंस्कारित (सिगरेट विहीन, तम्बाकू से परहेज करने वाला, मदिरा-मांस से दूरी रखने वाला और प्रतिदिन व्यायाम-योग करने वाला) होगा उसकी सेहत उतनी ही अच्छी होगी, सेहतमंद होगा। वह उतना ही अधिक प्रसन्न और सम्पन्न होगा ।

## 2. बीड़ी विष है, बड़ी नाकिस है, सांस खांसी है, दिल विनाशी है, सत्यानाशी है, फिर इसे क्योंकर पीना? इसे क्यों अपनाना ?

व्याख्या : बीड़ी के धुएं में करीब ४००० विषैले तत्व होते हैं ८ उसकी दहकती हुयी पत्ती की आंच से होंठ स्याह पड़ जाते हैं ८ बीड़ी से निकला हुआ धुआं सांस नली , श्वसन तंत्र विशेषतः सूक्ष्म वायुकोषों को झुलसा देते हैं ८ धुएं के अंदर उपस्थित विषैली पदार्थ जैसे तारकोल , निकोटीन ,साइनाइड ,कार्बन मोनो ऑक्साइड वायुकोषों में प्रवेश कर उन्हें प्रदूषित करते और घाव उत्पन्न कर देते हैं जिसके कारण वायुकोष ठीक से काम नहीं कर पाते हैं ८ वे पूरी क्षमता से आक्सीजन भी ग्रहण नहीं कर पाते हैं ८ वायु कोषों के अंदर उपस्थित कोलतार और अन्य प्रदूषित चीजें सांस -खांसी और कैंसर का कारण बनते हैं ८ फेफड़े के अतिरिक्त धूम्रपान से हृदय नलिकाओं में भी सूजन और घाव होना प्रारम्भ हो जाता है। बार बार बीड़ी पीने से हृदय धमनियों में तीव्र प्रदाह और एथरोस्क्लरोसिस की शुरुआत प्रारम्भ हो जाता है। जाती है और थोड़े दिनों के बाद हृदय नलिका के अंदर कोलेस्ट्रॉल, प्लेटलेट्स, आक्सीकृत चिकनाई का कचरा जमा हो जाता है। यह कचरा हृदय नलिका के अंदर शुद्ध रक्त का प्रवाह अवरुद्ध कर देता है। यह अवरोध हृदय शूल या हार्ट अटैक को जन्म देता है।

## 3. मोटापा-सर्वत्र वसा की घटा, चिकनाई की छटा ।

टिप्पणी: वसा की घटा का मतलब-गर्दन, पेट, जिगर, अग्नाशय, हृदय की नलिकाओं और गर्दन की धमनियों में चिकनाई का अंवार ) ।

## ४. मोबाइल की लत, हृदय की आफत।

व्याख्या: बड़े-बुजुर्ग कहते रहे हैं की लत या नशा किसी भी चीज का हो चाहे वह तम्बाकू की हो या धूम्रपान, हुक्का, सुती, गुटखा, शराब, सुपाड़ी, इ-सिगरेट (वेपिंग), अफमी, गांजा, चरस, कोकीन या भांग की हो सेहत का सत्यानाश करती है। वर्तमान समय में जब इलेक्ट्रॉनिक उपकरणों जैसे मोबाइल, लैप टॉप, एल इ डी स्क्रीन्स की बहुतायत हो गई है और इन साधनों ने विशेषतः मोबाइल फोन्स ने जीवन के हर पहलू हर वर्ग शिशु से लेकर वृद्ध, युवा, पुरुष और महिला तथा गरीब-अमीर सबके जीवन में प्रवेश ही नहीं किया है वरन वह उनके साथ चौबीसो घंटे चिपका रहता है। उसने एक लत का रूप ले लिया है। इसका फल यह हुआ है इन गैजेट्स ने व्यक्ति के सामाजिक और शारीरिक ताने बाने को अस्त व्यस्त कर दिया है। फिनलैंड विश्वविद्यालय में बच्चों और किशोरों में किये गया एक अध्ययन में यह पाया गया है की जो बच्चे तीन घंटे से अधिक समय मोबाइल अथवा लैप टॉप में लगते हैं उनके हृदय का भार बढ़ जाता है। धमनियों के अंदर लचकपन कम हो जाता है। उनकी आंतरिक झिल्लिया मोटो हो जाती है। ये सभी दुर्गुण मिल कर ऐसे किशोर को असामयिक हृदयाघात की तरफ ले जाते हैं। यह बहुत ही चिंताजनक स्थिति है।

माना की मोबाइल एक अत्यंत उपयोगी वस्तु है। आज के जीवन में अपरिहार्य चीज है। हमारा समस्त जीवन और कार्यक्रम उस पर निर्भर है पर हमें उसके अति प्रयोग पर, लत की हद तक जाकर सोते-जागते, खाते-पीते, स्नान कक्ष में, शौच-कक्ष में, लिफ्ट में, मेट्रो में, सीढ़ियों से उतरते-चढ़ते, व्यस्त बाजार और राजमार्ग पर चलते समय अथवा मोटर- बाइक पर बैठे बैठे इसके प्रयोग से बचना चाहिए तभी हम अपने हृदय, आँखें, गर्दन की हड्डियां, हाथों की अंगुलिया और मोबाइल से उठ रहे खतरनाक रेडियो विकिरण से बच सकेंगे। हर माता-पिता का कर्तव्य है की वह अपनी सुख सुविधा और समय को बचने के फेर में अपने नन्हे-मुन्नों को मोबाइल न पकड़ा दे और इस तरह अनजाने में उसे इसका लती बना दे और यह लत उनके नौनिहालों को महंगी पड़ जाए और वे कम उम्र में ही हृदयाघात के शिकार बन जाए। संक्षेप में मोबाइल की लत दिल, दिमाग, नेत्र और गर्दन की हड्डियों की सेहत के लिए बहुत खतरनाक है।

## 5. मैल मन न धरो, मलिन तन न करो, उत्सर्ज करो, अवगुण न धरो ।

व्याख्या: मैल (जंक, कूड़ा-कचरा, धुआँ-धक्कड़, उच्छिष्ट, कोलेस्टेरॉल, चिकनाई का अंवार ,कुविचार) कहीं का भी हो, किसी भी रूप में हो चाहे वह पेट में हो (कब्ज), मुंह के अंदर सुपाड़ी, गुटखा, सुती का कचरा हो हृदय नलिकाओं में (कोलेस्टेरॉल का कूड़ा-कचरा / हृदयावरोध), प्रोस्टेट अभिवृद्धि के फलस्वरूप उत्पन्न मूत्रावरोध हो, फेफड़े के वायुकोशों में धूम्रपान के कारण एकत्रित कोलतार, मस्तिष्क धमनियों के अंदर सूक्ष्म कचरा या अंतर्मन में कोई कुविचार हो जैसे ईर्ष्या, क्रोधाग्नि, कुढ़न, लंपटता आदि भाव, सुस्वास्थ्य के लिए समस्याएं खड़ा करता है। कब्ज के रोगी को पेट साफ हो जाने पर बड़ा संतोष मिलता है। तृप्ति का अनुभव होता है ८ लगता है पेट का सारा मल बाहर आ गया है।

अब उसे अंदर ही अंदर रुके मल से उत्पन्न सड़ांध का सामना नहीं करना पड़ेगा। न ही पेट के रास्ते निर्वाहिका शिरा (पोर्टल शिरा) के अंदर से होकर विषाक्त जीवाणुओं, विषाणुओं का जिगर पर कोई उपद्रव की सम्भावना का डर। कब्ज के इन्ही खुराफातों का डर साधारण आदमी को हमेशा सताता रहता है। कब्ज हृदय रोगियों और प्रोस्टेट के मरीजों के लिए बहुत कष्टदायी समस्या होता है।

मैल जितना अधिक होगा उतना अधिक अवरोध उत्पन्न करेगा और संकट उतना ही विकट होगा ,जैसे कठिन कब्ज के कारण आंत्रावरोध (आंतों में उलझन), हृदयावरोध के फलस्वरूप प्रबल हृदयाघात, फेफड़ों में सांस खांसी की बीमारी, मूत्र पथ में पथरी या प्रोस्टेट बढ़ने से भीषण मूत्रावरोध फिर मूत्र-संक्रमण, प्रबल मनस्ताप या क्रोधाग्नि से उत्पन्न हृदयाघात आदि रोग। जरूरत इस बात की है कि समय रहते हम इन परिस्थितियों (कब्ज, मूत्रावरोध, हृदय धमनी अवरोध, मस्तिष्क धमनी अवरोध, मनोविकार) का आकलन किसी योग्य चिकित्सक से करा लें और अपनी जीवन शैली में अपेक्षित सुधार ले आयें जिससे ये समस्याएं शरीर में जड़ न जमा सकें। यहाँ यह बताना बहुत जरूरी है कि प्रायः सभी प्रकार के मैल (मल / उच्छिष्ट पदार्थ) हमारी खराब जीवनशैली (अवगुण) के दुष्परिणाम हैं जो उत्तम जीवनशैली (सगुण) से सहज दूर हो सकते हैं ।

## 6. पढ़ोगे लिखोगे पूरे होंगे ख्वाब, खेलोगे कूदोगे मिलेंगे खिताब ।

दो जीवंत उदाहरण: पहली पंक्ति-23 अगस्त 2023 को सफल चंद्रयान 3 की पूरी टीम ।

दूसरी पंक्ति-सिफत कौर सामरा-जिन्हें एशियन गेम्स में शूटिंग में स्वर्ण पदक मिला।

## 7. आप मेरे लिए रोज एक घंटा पैदल चलो, मैं आपके लिए निरंतर चलता रहूँगा ।

-मैं हूँ आपका दिल ( दिल की शरीर से बातचीत )

## 8. हृदय नलियाँ, सदानीरा हैं, इनमें कूड़ा-कचरा न भरे ।

व्याख्या: मानव शरीर विधाता की अद्भुत रचना है। इसके अंदर हृदय और उससे जुड़ा परिसंचरण तंत्र सदानीरा गंगा की जलधारा की भांति हमारे शरीर को रक्त के माध्यम से चौबीसों घंटे प्रति क्षण पोषण करता है। इसका केंद्र हृदय है। अतएव हृदय का सुचारु रूप से काम करना बहुत जरूरी है। दिल को ठीक से काम करने के लिए उसकी तीनों प्रमुख नलिकाओं जैसे बाई मुख्य हृदय धमनी ,उसकी प्रमुख शाखा (बाई अग्र अवरोही धमनी तथा बाई परिपार्श्व पृष्ठ धमनी) और दाहिनी हृदय धमनी का अवरोध मुक्त होना बहुत जरूरी है। इन धमनियों में अवरोध उत्पन्न करने का काम हम स्वयं अपनी खराब जीवन शैली से करते हैं। ये खराब आदतें हैं: धूम्रपान, मौखिक तंबाकू-गुटखा, इ-धूम्रपान, जंक भोजन, लाल मांस का सेवन, शराब, व्यायाम हीनता, मोटापा/तोंद, क्रोध-अवसाद पूर्ण जीवन, रात देर तक जगना। ये समस्त आदतें हृदय नलिकाओं में कोलेस्टेरॉल का कचरा, हृदय की कोमल अंतर्कला (झिल्ली) में घाव तथा आग का अम्बार खड़ा कर देता है और हृदय नलिकाएं पूर्णतः अवरुद्ध हों जाती हैं । इसका परिणाम होता है हृदय-मृत्यु ।

## 9. खाना-पीना बैठे करना, घूंट सुरक्षित, चोक न होना ।

व्याख्या: भोजन हमेशा बैठ कर शांत चित्त से करना चाहिये। खड़े होकर खाना और साथ साथ जल्दी जल्दी बात करते खाने में भोजन सांस की नली में फंस सकता है और दम घुट सकता है। स्वतंत्र भारत के प्रथम वायुसेनाध्यक्ष सुब्रत मुखर्जी साहिब की मृत्यु जापान टोकियो में आठ नवंबर 1960 को खाते समय गले में मछली फंस जाने के कारण हो गई थी जिसका अंतरव्यथा हम सबको अभी तक सालती रहती है। ध्यान करने की बात यह है कि बुजुर्ग लोगों में यह खतरा बहुत अधिक होता है क्योंकि उनके निगलने को नियंत्रित करने वाली तंत्रिकाएं शिथिल पड़ जाती हैं और भोजन के सांस की नली में सरक जाने की संभावना बहुत बढ़ जाती है । इस बात की पुष्टि हाल में किए गए एक वैज्ञानिक अध्ययन से हुई है जिसके अनुसार भोजन करते समय या जल्दी जल्दी पानी पीते समय गला चोक हो जाने के कारण काफी संख्या में वयोवृद्ध लोगो की मौत हों जाती है। इसलिए खाना और पीना बैठ कर और धीरे धीरे ही श्रेष्ठ होता है।

## 10. जितनी अधिक जोखिम, उतनी जल्दी मुसीबत।

प्रमुख जोखिम तत्व - 1. धूम्रपान/तम्बाकू, 2. व्यायामहीनता, 3. जंक भोजन, 4. मोटापा, 5. उच्चरक्तचाप, 6. डायबिटीज, 7. तनाव खताव, 8. अवसाद, 9. निद्राहीनता, 10. जिम में अतिरेक, 11. मोबाइल का अत्यधिक प्रयोग, 12. पारिवारिक / खानदानी - अतिकोलेस्टेरॉल रक्तता

डाक्टर श्रीधर द्विवेदी  
वरिष्ठ हृदय रोग विशेषज्ञ  
नेशनल हार्ट इंस्टिट्यूट, नई दिल्ली

# Exercise for restrictive lung Disease

Some key points on physiotherapy breathing exercises for restrictive lung disease like - Interstitial lung disease, such as idiopathic pulmonary fibrosis.

Sarcoidosis, an autoimmune disease.

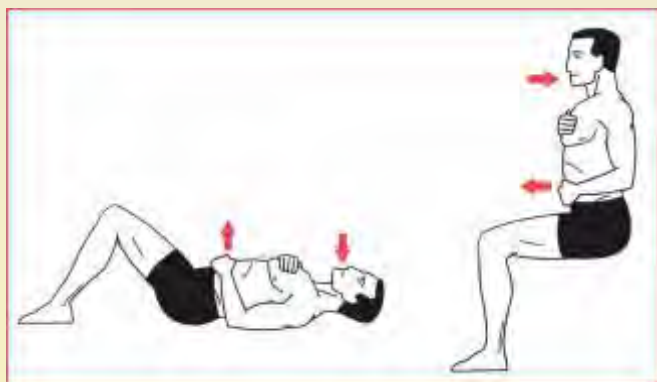
Obesity, including obesity hypoventilation syndrome.

Scoliosis.

Neuromuscular disease, such as muscular dystrophy or amyotrophic lateral sclerosis (ALS)

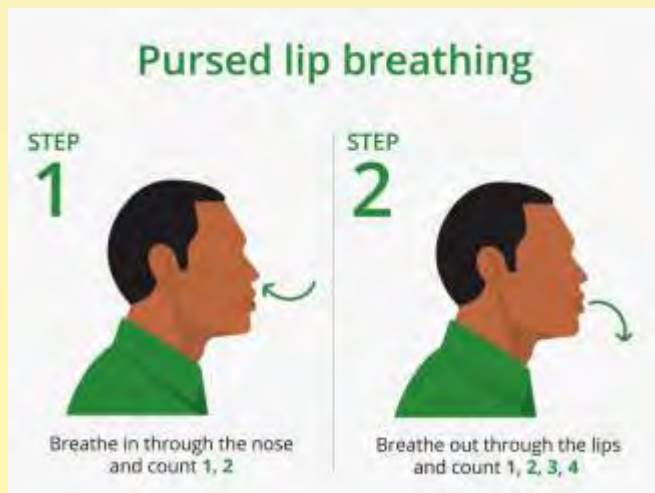
## 1. Diaphragmatic Breathing:

Patient to breathe deeply by engaging their diaphragm. This helps improve the efficiency of breathing and lung expansion.



## 2. Pursed-Lip Breathing:

Encouraging to inhale through the nose for a count of two and exhale through pursed lips for a count of four. This slows down breathing and promotes better oxygen exchange.



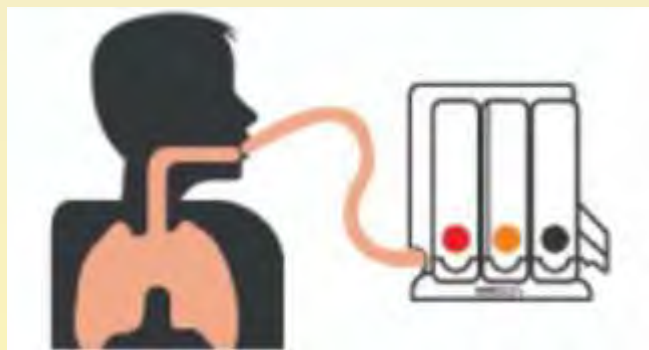
## 3. Segmental Breathing:

Focus on specific areas of the lungs by having patients place their hands on these regions and guide their breath into those areas. This helps improve ventilation in affected lung segments.



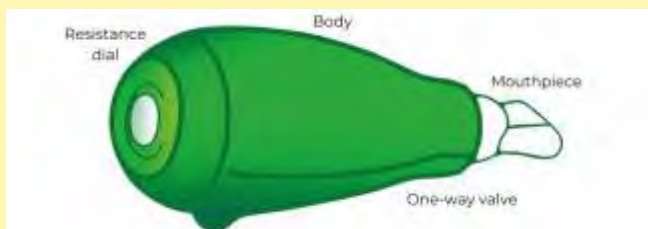
## 4. Incentive Spirometry:

Use a device like an incentive spirometer to measure and improve lung capacity. You should inhale deeply through the device to reach specific volume goals, helping prevent lung atelectasis.



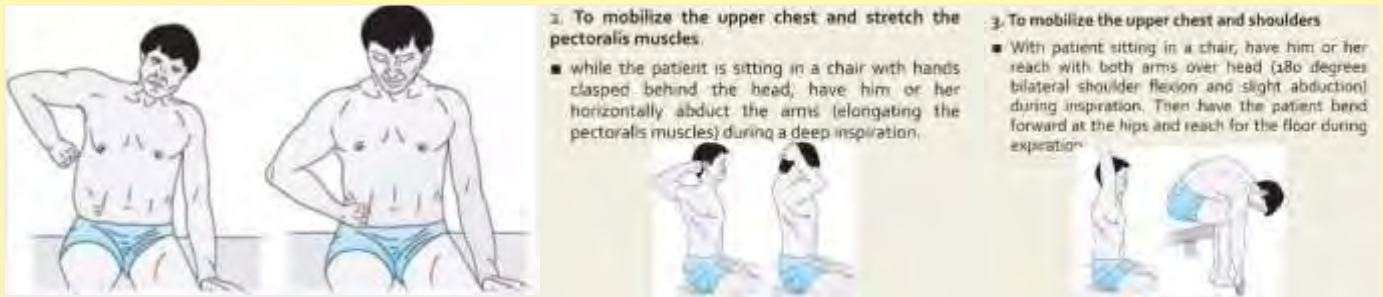
## 5. Positive Expiratory Pressure (PEP) Therapy:

Utilize PEP devices to create resistance during exhalation, which can help keep airways open and mobilize secretions.



## 6. Chest Wall Mobility Exercises:

Perform exercises that improve the flexibility and mobility of the chest wall, allowing for more effective expansion of the lungs.



## 7. Breathing Coordination:

Work on coordinating breathing with physical activities to enhance overall endurance and functional capacity.



physiotherapist or healthcare professional for proper assessment and guidance. Consistent practice of these exercises can significantly improve the quality of life for individuals with restrictive lung diseases.

## 8. Exercise Training:

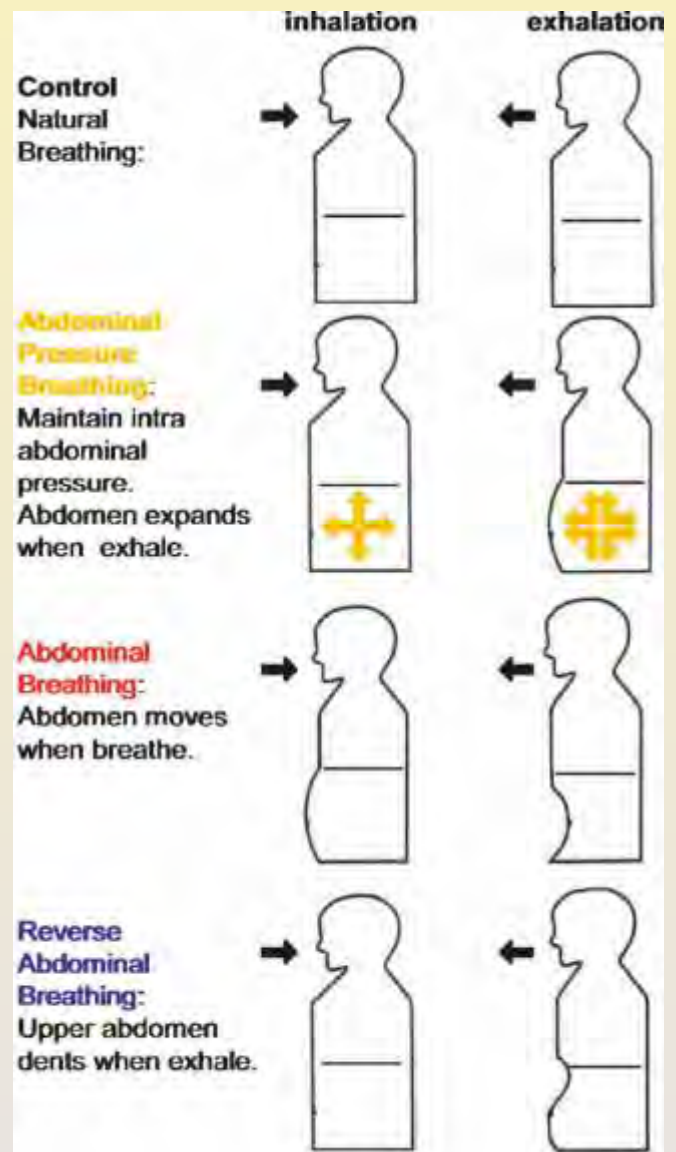
Incorporate aerobic and resistance exercises tailored to the individual's capabilities to improve overall lung function and respiratory muscle strength.



## 9. Breath Control Techniques:

This is a technique to control and manage their breathlessness during daily activities, reducing anxiety associated with breathing difficulties.

Remember that these exercises should be tailored to the patient's specific condition and abilities, and it's crucial to involve a qualified



– Dr. Zarleen Choungtham  
Sr. Physiotherapist, NHI

# BASIC ERGONOMICS WHILE DOING A SITTING JOB

Certainly, here are 10 physiotherapy exercises focused on ergonomic neck pain relief:

## 1. Neck Stretches:

- Gently tilt your head to one side, bringing your ear toward your shoulder. Hold for 15-20 seconds and switch sides.
- Slowly tilt your head forward, chin to chest, and hold for 15-20 seconds.
- Tilt your head backward, looking up toward the ceiling, and hold for 15-20 seconds.



## 2. Chin Tucks:

- Sit or stand up straight with your shoulders relaxed.
- Slowly and gently tuck your chin towards your chest, creating a "double chin."
- Hold for a few seconds and repeat several times.



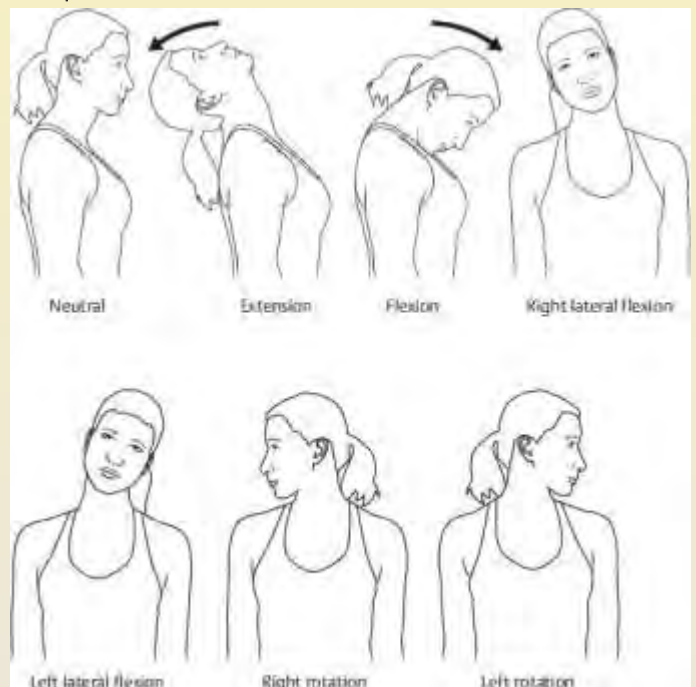
## 3. Shoulder Blade Squeezes:

- Sit or stand with good posture.
- Squeeze your shoulder blades together as if trying to hold a pencil between them.
- Hold for a few seconds and release. Repeat.



## 4. Cervical Rotations:

- Sit up straight and turn your head to the right, trying to bring your chin over your shoulder.
- Hold for a few seconds and return to the center. Repeat on the left side.



## 5. Neck Flexor Strengthening:

- Sit or stand with good posture.
- Gently press your tongue against the roof of your mouth.
- While doing this, nod your head slightly forward, feeling the muscles in your neck engage.
- Hold for a few seconds and release. Repeat.





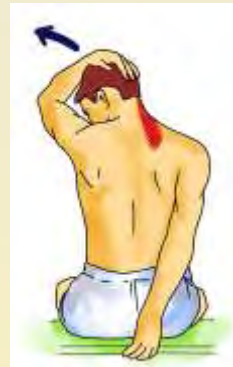
**6. Scalene Stretch:**

- Sit or stand with good posture.
- Reach your right hand over your head and gently pull your left ear towards your right shoulder.
- Hold for 15-20 seconds and switch sides.



**7. Levator Scapulae Stretch:**

- Sit or stand up straight.
- Reach your right arm behind your back and try to touch your left shoulder blade.
- Tilt your head to the left and hold for 15-20 seconds. Switch sides.



**8. Pectoral Stretch:**

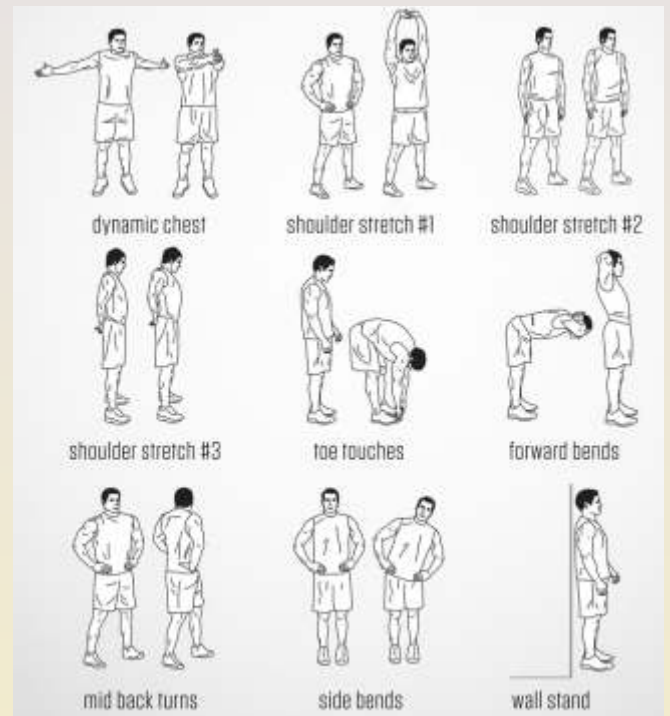
- Stand with your feet shoulder-width apart.
- Clasp your hands behind your back and gently pull your arms upward while squeezing your shoulder blades together.



**9. Posture Exercises:**

- Sit on an exercise ball to engage your core muscles and improve posture.
- Perform scapular retraction exercises to strengthen the upper back muscles.

**Posture Exercises: 20 Seconds each**



**10. Ergonomic Adjustments:**

- Ensure your workspace is ergonomically set up, with your computer monitor at eye level, feet flat on the floor, and a supportive chair.

Remember to consult with a physiotherapist before starting any new exercise routine, especially if you have existing neck pain or medical conditions. They can provide personalized guidance and adjustments to suit your needs.



– Dr. Zarleen Choungtham  
Sr. Physiotherapist, NHI



# ROLE OF NUTRITION IN SMALL CHILDREN

Our nation's destiny is in the hands of young children. If they're healthy, so will our country be in the future. Since children are like raw soil. They will pick up eating habits in the manner they were instructed to do so as children. As people age, they gain a better understanding of what is good and bad for their health from their early years. Sometimes, they find it easy to avoid eating foods that are unhealthy for their well-being. It is best to start providing a balanced diet to our bodies in childhood since they become accustomed to it.

It is said that several ailments, such as diabetes, high blood pressure, and obesity, are the result of inherited traits or genetic abnormalities. However, if we look at our daily lives, we can see that this is a result of parents' poor lifestyle, which kids undoubtedly adopt or follow from an early age. Therefore, it is crucial to alter the family's lifestyle rather than an individual's.

Generally, people learn about a balanced diet because of a disease or some health issues when they are young or old, but we should start paying attention when the child is still in the mother's womb. Because it is said that if the foundation is strong, only then will you see success and develop good habits.

## **A story can be a helpful tool for gaining understanding.**

Megha is from a rural city. She lives in a poor joint family with thoughts of ancient times. She has three children out of which there is a baby girl 'Rita' whom no one likes except her mother.

Megha explains her frustration with feeding her sick child when the other children go hungry because they have nothing to eat. Megha also explained that because of negligence and no support from her family, Rita had suffered from severe acute malnutrition (SAM) when she was young. The key drivers of acute malnutrition are family situations and potential food insecurity.

After facing many things and going against the family she joined a SAM community. Frequent screening & counseling sessions for mothers on optimal infant and young child feeding were conducted.

In the session, she was explained that "Breastfeeding is the best gift a mother, rich or poor, can give her child, as well as herself". Also, it is important to continue having regular visits to pediatric nutritionists so that the development of your child is correctly tracked and the nutritionist can appropriately advise you on when and what changes are best for the kids' health.

## **Benefits of Breastfeed**



- Builds a special bond between both mother & child.
- It is ready and available according to the infant's demand.
- Help protect babies against some short- and long-term illnesses and diseases.
- Producing oxytocin, which helps contract the uterus back to its pre-pregnancy size.
- Reduces Breast and ovarian cancer risk in mothers.

Infants will drink more and more every day. As the baby's stomach expands, the milk supply will also increase, so be sure to breastfeed the baby as frequently as they want to help the milk supply start and grow. Breastfeeding should be continued for further age. In case, the infant is unable to breastfeed then EBM commonly known as expressed breast milk can be made available to the infant & fed with other methods like a spoon and bowl; squeezable bottles; paladai (made up of steel that looks like a diya), etc. But while feeding in other ways it should be kept in mind that the quantity should be properly measured.

## **What are some ways to boost breast milk production?**

Lactating mothers should have a balanced diet.

It is important to make sure that the baby is latching properly and that milk is being removed efficiently from the breast.

To properly nurse a baby, alternate between each breast and offer each one twice during feeding.

It is recommended to feed the baby on demand or every 2-3 hours.

## 6 months and above:

Savitri is the mother of ten months baby boy 'Kartik'. She lives in a happy nuclear family. Kartik is the first child in the family; hence she did not know about the activities of children according to their age. Due to lack of information & fear, she was not able to feed the child according to his age.

Once she went to a family function, where she met a family, whose baby was of the same age. Although they were of the same age, there was a significant difference in their health and overall development. In front of that child 'Kartik' looks sick and drowsy and is barely interested in anything around him. She felt bad about herself & her child that she was not able to take good care of him.



The next day, she took her child for a pediatric checkup to determine the source of the mistake. Looking at the child, the pediatrician said that the child does not have enough food according to age. He referred to a pediatric nutritionist who will explain about feed.

### Firstly, Savitri must know What are the signs that the baby is ready for complementary feeding:

- Hold his hand head straight when sitting.
- Opens his mouth when others eat.
- Receives frequent breastfeeding but appears hungry soon after.
- Is not gaining weight adequately.

### The following points should be kept in mind

- Create space for mealtime.

Setting up a space to dedicate to the baby's mealtimes. Place their highchair at or near the family table and gather all supplies needed (cups, utensils, etc) in one spot. Being organized may make mealtime feel easier.

- **Explore flavors & textures.**

Babies at this age are more open to exploring a wide variety of Flavors and textures. So, as much as you are able, introduce them to new foods and foods prepared in different



attractive ways. Allow them to explore foods with their hands and remember they may not "like" a food the first time or two they try it.

- **Introduce one fruit or vegetable at a time.**

Introducing new foods to a baby can be overwhelming, but it's important to start with one variety at a time. For instance, parents can begin with carrots or apples instead of a mixed variety. By doing so, parents can easily detect if their baby has any food sensitivities.

- **Feed formula & breast milk take priority.**

Formula and breast milk are still the main source of nutrition for the baby even though they are beginning to eat more solid foods. Continue to feed formula & breast milk first to ensure the baby is meeting their nutritional needs. Try to time solid meals at least 30-60 minutes after a liquid feed to optimize the baby's hunger.

- **Enjoy eating together.**



Start the habit of eating together early. The baby will learn a lot by imitating when you eat, including table manners & how to eat with utensils. They will also want to eat what adults eat, so it's the perfect time to model healthy eating habits. Do your best to eliminate distractions (turn off the TV, put away phones & toys) to help the baby focus on learning to eat.

- It's okay to be messy.

Feeding a baby tends to get messy. It can be hard to embrace the mess. But exploring food with their hands is one way babies learn. If you let your little one get messy when feeding, they are more likely to try foods & are less likely to have feeding challenges as they get older.

- Never let the baby fall asleep with a bottle. This causes milk to pool in her mouth, leading to tooth decay.

Mansha Arora, Pediatric Nutritionist, Smile Train Project

Dr Gargi Singhal, Pediatric Dentist,

Dr Karoon Agrawal, Consultant Plastic Surgeon



49-50, Community Centre, East of Kailash, New Delhi-110065

Tel.: +91-11-46600700 (30 lines), 46606600 (30 lines)

E-mail: [contact@nhi.in](mailto:contact@nhi.in) Website : [www.nationalheartinstitute.com](http://www.nationalheartinstitute.com)

**Toll Free No.: 18005726600**

*40<sup>th</sup> Year  
of Excellence...*

Deptt. of Nephrology: Renal Clinic, Dialyses & Critical Care

Deptt. of Urology : Prostate & Kidney Surgery  
Endoscopic Stone Removal

Deptt. of Oncology : Cancer Surgery & Chemotherapy

**Mission -**

**"Provide Superior, Compassionate and Innovative Cardiac Care to prevent and treat diseases maintaining highest standards in safety and quality"**

**Department of Cardiology-**

Cardiology OPD, Intensive Coronary Care, Coronary Angiography Angioplasty, Congenital Heart Disease, Pacemaker Implantation.

**Department of Cardio-Vascular Surgery-**

Bypass Surgery, Valve Surgery, Congenital Heart Disease operations, Carotid Surgeries, Peripheral Vascular Surgery and Endovascular & Stenting Procedures.

**Department of Diabetes & Life style Disorders-**

Diabetes Clinic, Thyroid Clinic, Foot Care Clinic, Weight Management Counseling, Diabetes Emergency Care, Diet Counseling.

**Department of Internal Medicine**

**Department of Pulmonology & Sleep Medicine-**

Chest Clinic, Sleep Lab, Apnea Therapy, Lung Function Tests.

**Department of Radiology -** All X-Rays, Ultrasounds & CT Scan.

**Deptt. of Nuclear Medicine -** Gamma Camera.

**Department of Pathology & Microbiology -** All investigations.

**Executive Health Check-up Packages.**

**Free outdoor and Indoor Treatment for underprivileged.**

**ACCREDITED HOSPITAL**

