



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Friday

20220909

Unapproved antibiotics

Checks must to avoid resultant antimicrobial resistance (The Tribune: 20220909)

<https://www.tribuneindia.com/news/editorials/unapproved-antibiotics-429840>

Exposing challenges in tackling antimicrobial resistance in India, a new Lancet research points out that an alarming 47 per cent of the antibiotics consumed by patients undergoing treatment in the private sector in 2019 were formulations that did not have the nod of the drug regulator. And, given that the private sector contributes to over 85 per cent of the total consumption of antibiotics, this practice assumes alarming proportions and raises safety and efficacy concerns. The fact that the per capita consumption rate in daily defined doses (DDDs) has come down to 10.4 DDDs from 13.6 in 2015 calls for a tightening of policy and regulatory reforms.

The slow progress in healing this critical component of healthcare highlights the fact that the authorities' attempts to find a way out of the complex web of causative factors have been ineffective. Poverty is at the root of this rampant illegality, for a majority of the patients can't afford proper treatment and the near-absence of medical insurance drives them to quacks or pharmacies that blatantly sell drugs without prescriptions. Such patients, thus, fall into a vicious trap as over-the-counter antibiotics and their ill-matched combinations often lead to resistance to drugs.

The drug regulators also need to devise a stricter system of controls and checks as the spurious production and sale of unapproved pills and potions undermine India's reputation as the leading producer of generic drugs. On one hand, its multi-billion dollar pharmaceutical industry aims to scale global heights in the production of vaccines, medicines and medical devices, but on the other hand, it is tainted with scams. Instances of pharma units failing quality tests in Himachal Pradesh's Baddi — the pharma hub of North India — are symptomatic of the countrywide malaise. Just last week, in the second such case in two years, a Baddi unit

authorised to manufacture only neutraceuticals was sealed as it was found to be manufacturing illegal drugs. Such deadly deeds must be dealt a deathly blow.

TB

Over 66 per cent TB patients consent to government's community adoption and care plan

At present 13,51,742 people are being treated for TB nationally with 30 per cent seeking care in the private sector (The Tribune: 20220909)

<https://www.tribuneindia.com/news/nation/over-66-pc-tb-patients-consent-to-governments-community-adoption-and-care-plan-429796>

per cent TB patients consent to government's community adoption and care plan

Photo for representational purpose only. iStock

Nearly three of every five tuberculosis patients currently on treatment in the country have agreed to be adopted and cared for by the community under a revolutionary new plan the government has finalized to make TB free India a public campaign.

At present 13,51,742 people are being treated for TB nationally with 30 per cent seeking care in the private sector.

Of these patients, which include multi and extreme drug resistant, 8,97,421 have consented to be adopted under Pradhan Mantri TB Mukh Bharat Abhiyan, a community programme that will enable individuals, politicians, political parties, NGOs, corporates and even educational institutions to adopt patients in their areas of choice and support them with nutrition, vocational, diagnostic and other components to hasten their recovery. The programme won't allow monetary components as support.

As of today, 66 per cent of the patients on treatment have consented to be part of the plan, the proportion being high in northern states --70.55 per cent in Punjab; 46.76 per cent in Haryana; 79.49 per cent in Delhi; 82.93 per cent in Chandigarh; 54.22 per cent in J-K; 57.93 per cent in Ladakh, 67.79 per cent in Himachal.

President Droupadi Murmu will launch the campaign on Friday, with health minister Mansukh Mandaviya all set to adopt 15 TB patients out of 87 who have consented to be adopted in his own home block of Palitana in Gujarat.

The idea behind the plan, sources said, was to elevate the goal of TB free India from a mere government programme to a people's movement.

"We have seen in the past that people have responded to Prime Minister Narendra Modi's calls for public participation in the Swachh India campaign, Covid vaccination, and campaign to boost the morale of Covid warriors. We have now decided to involve people in caring for TB patients who can recover faster with nutritional support and treatment monitoring. Anyone

volunteering to adopt TB patients can register on a special portal created for the purpose, look for the number of patients in their chosen area who have agreed to be adopted and decide how many to adopt. It is a purely voluntary programme,” sources said.

The volunteering individual or organization can commit to support the patient for one to three years and would have to declare that they would not share the patient details for any purpose except TB treatment.

The support would involve a nutrition kit (specifications given on the portal) for each patient once a month for at least six months, the normal period of recovery.

”Those who adopt patients would call them up to check on medicine compliance. Access to patients would be strictly through the government TB officers and privacy would be assured,” said a health ministry official.

At present 65 to 70 pc TB patients are aged 15 to 45 years with most in need of treatment and support.

The plan is rooted in Uttar Pradesh governor Anandiben Patel’s experiment of adopting TB patients in the Rajbhavan and managing to improve treatment outcomes.

India has pledged to be TB free by 2025, five years ahead of the UN Sustainable Development Goal target of 2030.

Annually, 20 to 25 lakh new TB patients are detected in India but around 13.5 lakh are on treatment at a given point.

India houses one fourth of the global TB patients.

High BP

High BP may speed up bone ageing, says study (The Tribune: 20220909)

<https://www.tribuneindia.com/news/health/high-bp-may-speed-up-bone-ageing-says-study-429769>

A team of researchers has discovered that high blood pressure may lead to bone loss and osteoporosis-related bone damage.

In lab studies on rats, they found that when compared to the young mice without hypertension, the young mice with induced hypertension had a significant 24 per cent reduction in bone volume fraction.

They also suffered from an 18 per cent reduction in the thickness of the sponge-like trabecular bone located at the end of long bones, such as femurs and the spinal column, and a 34 per cent reduction in estimated failure force, which is the ability of bones to withstand different types of force.

"In contrast, the older mice who were given the angiotensin-II infusion did not exhibit similar bone loss.

High blood pressure and osteoporosis are common diseases affecting people and some can have both simultaneously.

"Bone marrow is where both new bone and new immune cells are produced. We suspect that more pro-inflammatory immune cells in the bone marrow may be leading to damage of the bone and making it weaker," said Elizabeth Maria Hennen, from Vanderbilt University in Nashville, Tennessee, the US.

"By understanding how hypertension contributes to osteoporosis, we may be able to reduce the risk of osteoporosis and better protect people later in life from having fragility fractures and a lower quality of life," she added.

The researchers compared young mice (equivalent human age 20-30) with induced hypertension to older mice (equivalent human age 47-56) without hypertension to understand the relationship between hypertension and bone ageing, according to the study presented in American Heart Association's Hypertension Scientific Sessions 2022 conference.

"Twelve young rats and 11 older rats were given angiotensin II– a hormone that leads to high blood pressure for six weeks," the researchers said.

"Two other control groups of 13 young mice and 9 old mice received a buffer solution that did not include angiotensin II, and these mice did not develop high blood pressure," they added. After six weeks, the bones of rats from all four groups were analysed using micro-computed tomography, an advanced imaging technique.

Antibiotics

Lancet study: 47% antibiotics in India unapproved (The Tribune: 20220909)

<https://www.tribuneindia.com/news/nation/study-47-antibiotics-in-india-unapproved-429543>

Lancet study: 47% antibiotics in India unapproved

A significant new Lancet study has revealed that unapproved antibiotic formulations constituted 47.1 per cent of all antibiotics consumed in the private sector in 2019 signalling the need for stricter regulations. - File photo

A significant new Lancet study has revealed that unapproved antibiotic formulations constituted 47.1 per cent of all antibiotics consumed in the private sector in 2019 signalling the need for stricter regulations.

The study said that although the per capita private-sector consumption rate of antibiotics in India is relatively low compared with many countries (including Sri Lanka and Pakistan), India consumed a large volume of broad-spectrum antibiotics that should ideally be used sparingly.

“This, together with a significant share of fixed dose combinations (FDCs) from formulations outside the National List of Essential Medicines and a large volume of antibiotics not approved by the central drug regulators, call for significant policy and regulatory reform,” the authors said.

They examined the private sector antibiotic use, which contributes to 85-90 per cent of the total consumption in India and measured the use in daily defined doses (DDDs).

The study found total DDDs consumed in 2019 in India was 5,071 million (10.4 DDD per 1,000 per day).

Formulations listed in the NLEM contributed 49.0 per cent (2,486 million DDDs); FDCs contributed 34 per cent (1,722 million), and unapproved formulations contributed 47.1 per cent (2,408 million DDDs).

This is the first published study analysing private sector consumption of systemic antibiotics in India using the DDD metrics. Per capita consumption rate of 10.4 DDDs in India was found lower compared to 2015 (13.6 DDDs). In the Asian context, Sri Lanka registered a higher DDD of 16.3, China and Pakistan reported 8.4 and 19.6, respectively.

Weight gain

Weight gain, reduced stamina signs of long Covid: Lancet (The Tribune: 20220909)

<https://www.tribuneindia.com/news/world/weight-gain-reduced-stamina-signs-of-long-covid-lancet-429408>

Young people infected with Covid-19 are likely to have increased cholesterol, a high body mass index (BMI), and reduced physical stamina after the infection, as per a study published in The Lancet infectious diseases journal.

Some people with Covid-19 have lingering symptoms for weeks or months after they begin to recover. The researchers from the University of Zurich, Switzerland, found that these people may be more likely to develop metabolic disorders and cardiovascular complications in the long term

“Increased BMI, high cholesterol and lower physical stamina is suggestive of a higher risk of developing metabolic disorders and possible cardiovascular complications,” said study’s

principal investigator Patricia Schlegelhauf. The study evaluated possible long Covid implications in young Swiss military personnel. It was conducted between May and November 2021 with 29 female and 464 male participants with a median age of 21. Unlike other studies, the new research also evaluated cardiovascular, pulmonary, neurological, ophthalmological, male fertility, psychological and general system.

HPV vaccine

Why do boys need to get the HPV vaccine between 9 and 15? (The Indian Express:20220909)

<https://indianexpress.com/article/lifestyle/health-specials/why-do-boys-need-to-get-the-hpv-vaccine-between-9-and-15-8139309/>

With this dose, boys are protected and cannot transfer the virus from partner to partner. Together with vaccinated girls, they can build a herd immunity of sorts in the community, advises Dr Sarika Gupta, Consultant, Gynecologic Oncology and Robotic Gynaecology, Indraprastha Apollo Hospital, New Delhi(Indian Express: 20220909)

The virus doesn't have a gender bias and without the vaccination, every sexually active person is a carrier with the risk of developing cancer at some point in his/her life. (File)

Most of us think that the human papilloma virus (HPV), an easily sexually transmitted virus, causes only cervical cancer in women. What's not talked about as much is that it leads to a variety of cancers in men, too, some of which are spiralling. According to a Memorial Sloan Kettering Cancer Centre newsletter of 2021, HPV led to a five-fold increase of head and neck cancers in young men in the US from 2001 to 2017, the data being formally released at the 2021 annual meeting of the American Society for Clinical Oncology. In fact, oncologists at Sloan Kettering found that cases of head and neck cancer were being reported by people infected with the virus many years ago. Which means there is a delay between infection and development of cancer in men and boys should be seen at risk too. Dr Sarika Gupta, Consultant, Gynaecologic Oncology and Robotic Gynaecology at Indraprastha Apollo Hospital, New Delhi, argues that while the HPV vaccine has been rolled out in the country and there is an awareness campaign to get all girls vaccinated, there is enough reason to vaccinate boys as well.

Modelling by the University of Warwick estimates that by 2058 in the UK, the HPV vaccine programme currently being used (vaccinating both girls and boys) could prevent up to 64,138 HPV related cervical cancers and 49,649 other HPV related cancers.

Also Read |HPV vaccine to prevent cervical cancer will be given in 2 to 3 doses, school-based drives to be effective, say experts

How does the HPV virus cause cancer in boys/men?

The virus doesn't have a gender bias and without the vaccination, every sexually active person is a carrier with the risk of developing cancer at some point in his/her life. Most HPV infections may go away on their own. But some of these can cause certain types of cancer. If you look at the US data from the Centers for Disease Control and Prevention (CDC), between 2013 and 2017, there were approximately 25,000 cases of HPV-associated cancers in women and 19,000 in men. CDC data further shows that there are now more cases of head and neck cancers than cervical cancers in the US, 70 per cent of which are caused by the HPV virus. So, both boys and girls are being vaccinated in the US at the school level itself. The virus even causes oropharyngeal cancer at the back of the throat, including the base of the tongue and tonsils, in both men and women.

The HPV vaccine can be recommended for both boys and girls as soon as they turn nine. It protects both equally. For boys, the ideal age category would be between nine and 15 as it gives maximum protection in the early years and elicits better antibody response. With this dose, boys are protected and cannot transfer from partner to partner. So, they cannot transmit the virus to girls and together they can build a herd immunity of sorts in the community. Of course, it is important at this point to immunise girls, considering India is carrying one of the highest burdens of cervical cancer after Africa, but we must not forget the boys and do a risk assessment too.

What should the dosage be for boys?

Between nine and 15 years, only two doses are enough. But if you sign up later, you would need three doses

Does the vaccine protect against all HPV viruses?

There are 15 strains of the virus and our home-grown vaccine can protect the young population against four strains, among them the two main aggressive ones. The imported vaccines take care of nine strains. It is the best way of preventing cancer and many countries are seeing a drop in cases post-vaccination.

Also Read |Why indigenous HPV vaccine has the potential to drastically bring down the incidence & deaths caused by cervical cancer in India?

Why is HPV a silent threat for boys?

HPV can cause several kinds of cancer. But only cervical cancer can be detected early with a screening test. In fact, women should not forget to get their pap smear screening done every year after they are 25. The other cancers caused by HPV may not be detected until they manifest rather late in the day. The HPV vaccine prevents such threats.

Which countries have introduced HPV vaccines for boys?

Many Western nations have, particularly the US and UK. Twenty-five percent of all global deaths due to cervical cancer occur in India, according to a report by the George Institute of Global Health. In African nations, it is 30 to 40 per cent. Which is why at this point in time, our girls need it more and supplies have to be prioritised. When we have enough, even boys can have it. The HPV vaccine, first introduced in the US in 2006, has proven so effective that

WHO says it could, in combination with screening, eliminate cervical cancer worldwide by the end of the century.

Apart from the US and UK, Australia, Austria, Bermuda, Brazil, Canada, Croatia, Germany, Israel, Italy, Lichtenstein, New Zealand and Serbia have “gender neutral” immunisation programmes.

Artificial sweeteners

Can artificial sweeteners increase the risk of heart attack? How much sugar can one have then? (The Indian Express:20220909)

<https://indianexpress.com/article/lifestyle/health-specials/can-artificial-sweeteners-increase-the-risk-of-heart-attack-how-much-sugar-can-one-have-then-8139093/>

Artificial sweeteners most likely irritate the lining of blood vessels, resulting in endothelial dysfunction. The recommendation for reducing consumption of refined sugar is justified, to prevent obesity, cardiovascular disease and diabetes. However, that should not lead to extensive use of artificial sweeteners, says cardiologist Dr K Srinath Reddy

For all those who like to add sweeteners to their morning tea, thinking they are safe and will keep their sugar levels in check, know this: They could affect your heart.

In a new study, researchers have identified a possible link between artificial sweeteners and heart disease and concluded that food additives “should not be considered a healthy and safe alternative to sugar.” The new study, published in The BMJ, examined and tracked more than 100,000 adults from France. The authors, led by experts from the Sorbonne Paris Nord University, examined participants’ intake of sweeteners from all dietary sources including drinks, table top sweeteners, and dairy products and compared it to their risk of heart or circulatory diseases. Participants had an average age of 42 and four out of five were female.

Read other Health Specials |How fast can you lower cholesterol? What are the top foods that reduce bad cholesterol?

The researchers had an average follow-up period of nine years and recorded 1,502 cardiovascular events, including heart attacks, strokes, transient ischemic attacks and angina. Artificial sweetener consumption was linked to a nine per cent higher risk of heart disease. Isolating the risk factors for every kind of illness, they found that artificial sweetener consumption was linked to an 18 per cent higher risk of cerebrovascular disease. In fact, a sweetener with aspartame was associated with a 17 per cent increased risk of cerebrovascular events, while acesulfame potassium and sucralose were associated with increased coronary heart disease risk. “In this large-scale, prospective cohort of French adults, artificial sweeteners (especially aspartame, acesulfame potassium and sucralose) were associated with increased risk of cardiovascular, cerebrovascular and coronary heart diseases. The results suggest that

artificial sweeteners might represent a modifiable risk factor for cardiovascular disease prevention. The findings indicate that these food additives, consumed daily by millions of people and present in thousands of foods and beverages, should not be considered a healthy and safe alternative to sugar, in line with the current position of several health agencies.”

Commenting on the study, Dr K Srinath Reddy, cardiologist and president, Public Health Foundation of India (PHFI), said, “Artificial food additives have mostly proved hazardous to health. Trans fats, introduced to lengthen shelf life of food products, have now been shown to shorten human life. Artificial sweeteners also carry risks, as shown in this study. It is likely that the lining of blood vessels may be irritated, resulting in endothelial dysfunction. The recommendation for reducing consumption of refined sugar is justified, to prevent obesity, cardiovascular disease and diabetes. However, that should not lead to extensive use of artificial sweeteners. The best scientist of all time is Nature. It experiments with a vast diversity of its products, using the laboratory of evolutionary biology, to determine what is best for the human body.”

Insisting that observational studies like these can only show an association, Dr Reddy said that, “More research will help to corroborate these findings and elucidate the mechanisms while the precautionary principle can apply to public policy and personal practice.”

Read other Health Specials |Cutting Edge: How HoloLens2, a new imaging device, guided an innovative shoulder replacement

Dr K K Talwar, cardiologist at PSRI, said that anything laced with chemicals will always be harmful to the body as a whole and he has never recommended sweeteners for this reason. “The study corroborates what we had known for a long time. This will certainly stimulate more studies in this area to get evidence-based information,” he added.

Dr Nityanand Tripathi, Director & HOD, Cardiology & Electrophysiology, Fortis Hospital Shalimar Bagh, says, “Artificial sweeteners are synthetic sugar substitutes and they are intense because they are sweeter than sugar. There are many studies on the effects of artificial sweeteners. This is a matter of concern because artificial sweeteners are frequently used in many dairy products, chocolates and drinks. Many diabetic patients are also using artificial sweeteners as it does not affect the insulin level, nor does it increase the sugar. It also does not increase triglycerides (a type of fat found in the body). Therefore it was thought that it would be safe. But contrary to that, another large data has come in a recent study involving almost one lakh patients, where it has been shown conclusively that artificial sweeteners do increase the cardiovascular risk and also the risk of getting heart attack and CVS by 9 per cent and aspartame, particularly by 17 per cent. Therefore, it is prudent that one should not consume large amounts of artificial sweeteners.”

Cholesterol

To avert such risks, it is important to maintain low cholesterol by choosing a healthy lifestyle, getting regular tests, doing exercises and taking medicines (if advised). (The Indian Express:20220909)

<https://indianexpress.com/article/lifestyle/health-specials/how-cholesterol-balance-drugs-diet-lifestyle-changes-8138277/>

Sedentary lifestyle, poor work-life balance, inadequate sleep and excessive consumption of junk food have undoubtedly aggravated the risks of lifestyle diseases. Cholesterol is one of the natural components in blood that supports functioning of cell membranes and balances hormone levels. However, its high levels can lead to many health problems. Increased cholesterol levels can clog arteries which can lead to heart diseases, heart attacks or even strokes. Increased BMI, high cholesterol and lower physical stamina are the reasons behind developing metabolic disorders and possible cardiovascular complications.

According to a survey, one in two Indians is either in the “high risk” or “borderline” category of suffering from or developing diseases like high blood pressure and cholesterol. To avert such risks, it is important to maintain low cholesterol by choosing a healthy lifestyle, getting regular tests, doing exercises and taking medicines (if advised).

How to know about your cholesterol levels?

The normal total cholesterol level is lower than 170 mg/dL for 19 year-olds or younger and 125-200 mg/dL for those older. When it comes to LDL cholesterol, the normal level is lower than 110 mg/dL for 19 years and below and less than 100 mg/dL for 19 years or above. For HDL cholesterol, the normal levels are above 45 mg/dL (19 years or below) and 40 mg/dL or higher for men and 50 mg/dL or higher for women above 19 years. The normal triglycerides levels should be lower than 150 mg/dL for all adults.

SUBSCRIBER ONLY STORIES [View All](#)

In sharp slide in global oil prices, hope for easing of inflation in India [Premium](#)

In sharp slide in global oil prices, hope for easing of inflation in India

With micro forests, how a district in Punjab expands its green cover [Premium](#)

With micro forests, how a district in Punjab expands its green cover

UPSC Key-September 8, 2022: Why you should read ‘Subhas Chandra Bose and ... [Premium](#)

UPSC Key-September 8, 2022: Why you should read ‘Subhas Chandra Bose and ...

Chai pe charcha, Dalit home visits, regular tours: BJP charts a plan for ... [Premium](#)

Chai pe charcha, Dalit home visits, regular tours: BJP charts a plan for ...

Subscribe Now to get 66% OFF

Don't miss |How to maintain a healthy cholesterol level? Just avoid CRAP (calorie-rich and processed) food

Tips to manage cholesterol

Cholesterol levels can be managed by making lifestyle changes and adopting healthy practices like:

Healthy eating: You should start eating healthy food and avoid saturated fats like red meat or dairy products that can help you reduce bad cholesterol. You should eliminate trans-fats items like fried snacks, cakes and food that you order out often. Also, adding items rich in Omega-3 fatty acids can improve your health and help in reducing blood pressure. You should add soluble fibres like kidney beans, oats and sprouts to reduce cholesterol absorption.

Exercise regularly: Working out regularly and following an active lifestyle can help you reduce cholesterol levels. You should work out at least 30 minutes a day to maintain your fitness. Simple exercises like walking, cycling, playing sports can greatly benefit you. Carrying extra weight also contributes to high cholesterol levels and exercising and keeping track of your calories can, therefore, benefit you in multiple ways.

Also Read |When should cholesterol lowering drug Statin be used to prevent heart attack?

Quit smoking and alcohol: Apart from improving cholesterol level, quitting smoking balances your blood pressure and heart rate, leading to better blood circulation and lung function with lower risks of heart diseases. Similarly excessive amounts of alcohol too can negatively impact your cholesterol and can aggravate chances of developing heart diseases, so you must avoid drinking it for better health.

Take medicines: If you have high cholesterol levels and lifestyle changes are inadequate to bring you relief, then you should consult a doctor who may prescribe you medicine. Cholesterol-lowering medications like statin, nicotinic acid, fibric acid, cholesterol absorption inhibitors can bring your levels under control.

What is the timeline I am looking at reducing my level?

There is no magic formula to reduce cholesterol overnight. Yes, if levels are serious, drugs should take care of the problem. But in the end it is dietary and lifestyle changes that should support the drug. Although the latter may not produce the results you want, no matter what you read on the internet or social media, you may see a significant change after months of compliance. Let me emphasise, while medicines are the recommended first line of treatment, lifestyle/diet changes need to happen parallelly to ensure a lasting outcome. Hence both need to go hand in hand from the word go.

Maintaining healthy cholesterol levels is extremely vital to lead a healthy and happier life. You can take small steps that can ultimately lead towards a better and safe future. While managing cholesterol levels, you shouldn't count on medicines alone but follow a holistic approach like a disciplined lifestyle, healthy eating habits, regular exercises to eliminate the risks of diseases and health complications.

Dementia

Dementia: Brisk walking cuts down risk by more than 50%, finds study (The Times of India:20220909)

<https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/dementia-brisk-walking-cuts-down-risk-by-more-than-50-finds-study/photostory/94075946.cms?picid=94076028>

Dementia is a syndrome that leads to deterioration in cognitive function. It is an umbrella term which includes a number of health ramifications that affect memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgment

The seventh leading cause of death among all diseases, dementia can be prevented by brisk walking, a study has found and has generated a new hope around the management and treatment of this health complication.

Read: Type 1.5 diabetes-How is it different from type 1, type 2 diabetes?READMORE

02/8What does the study say?

A new research study published in the JAMA Neurology, has found a link between daily step count and incidence of dementia.

"The findings in this study suggest that accumulating more steps per day just under the popular threshold of 10 000 steps per day and performing steps at higher intensity may be associated with lower risk of dementia onset," the researchers of the study have said.

03/8The study was based on more than 78,000 adults

This cohort based study was done on 78,430 adults in the UK of which 35040 were male and the rest were females.

The study took into account incidental steps which is less than 40 steps per minute, purposeful steps which is 40 steps per minute and peak 30 minute cadence which is mean steps per minute recorded for the 30 highest, not necessarily consecutive, minutes in a day.

04/8What is the ideal step count?

As per the researchers, brisk walking between 3,800 and 9,800 steps is ideal to reduce the risk of dementia.

The study found that participants between the ages of 40 and 79 years of age who walked 9,826 steps daily were 50% less likely to develop dementia within seven years.

The researchers also found that people who walked with purpose, which covered 40 steps per minute, could actually reap the most benefits with just 6,315 steps. These people could cut down the risk of dementia by 57%.

People who walked 3,800 steps per day reduced the risk of dementia by 25%.

“It is a brisk walking activity, like a power walk,” study coauthor Borja del Pozo Cruz, an adjunct associate professor at the University of Southern Denmark in Odense, Denmark, and senior researcher in health sciences for the University of Cadiz in Spain told CNN.

READMORE

05/8It's a godsend for sedentary individuals

Usually people who have a sitting-mode life hesitate to embark on the walking journey with the apprehension that walking is then beneficial when the step count goes above 10,000 steps.

Debunking this myth, the researchers have given a new reason to start walking. Walking just 40% of the 10k steps rule, can drop the risk of dementia by 25%. The more you walk, the lower is your risk for dementia.

06/8Prevalence of dementia

As per the WHO estimates, currently more than 55 million people live with dementia worldwide, and there are nearly 10 million new cases every year.

According to a Lancet study, about 153 million people will have dementia by 2050. The study has said that potential risk factors like smoking, obesity, and high blood sugar might drive the health complication in 7 million of these cases.

"We estimated that the number of people with dementia would increase from 57.4 (95% uncertainty interval 50.4–65.1) million cases globally in 2019 to 152.8 (130.8–175.9) million cases in 2050," the Lancet study says.

The common symptoms of dementia are:

forgetfulness

losing track of time

feeling lost even in familiar places

confusion

difficulty in communication

requiring assistance even for doing basic chores

behavioural changes

difficulty in walking

08/8Walk can also be an indicator of dementia

Did you know that walking style is a potential indicator of the onset of dementia. A research study has found that people above 65 years of age who walk 5% slower or more each while also showing declining cognitive function are more likely to develop dementia.

The study published in JAMA Network is based on a group of Americans over 65 and Australians over 70 years of age. The participants were observed for 7 years and during this time they were asked to take cognitive tests and were assessed.

Coronavirus myth: Vitamin D supplements

Coronavirus myth: Vitamin D supplements won't protect you from the infection, says studies (The Times of India:20220909)

<https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/coronavirus-myth-vitamin-d-supplements-wont-protect-you-from-the-infection-says-studies/photostory/94073871.cms>

Vitamin D is essential for our body to absorb calcium and phosphate, keeping our muscles and teeth healthy as well as bones strong. Vitamin D is also known to help the immune system fight off any invading bacteria and viruses.

At the initial phase of the pandemic, doctors noticed that people with lower levels of vitamin D appeared to have a higher risk of dying from a severe COVID infection. This led to a flood of speculation on the internet, especially on social media, that taking vitamin D supplements can protect you from getting infected with COVID. So, many people started routinely popping vitamin pills, without knowing whether their bodies truly required any or not.

To bust this myth bubble, two new large clinical trials have found that taking vitamin D supplements is not really going to prevent you from getting infected with COVID-19, or any other respiratory infection, even if your current levels of the vitamin are low.

02/6About the research

About the research

A research from the UK, conducted during the height of the pandemic, gave 3,100 people with insufficient levels of vitamin D a low or a high dose of the vitamin. Their attempt was to find out whether taking these supplements would prevent Coronavirus or any other respiratory infection.

Another double-blinded, randomized clinical trial, also conducted during the pandemic, gave around 34,000 Norwegians cod liver oil or a placebo, to test if there was any impact of vitamin D on COVID prevention. Both the studies were published in The British Medical Journal.

READMORE

03/6Here are the findings

Here are the findings

The studies found that vitamin D supplementation - whether through high dose, low dose, or cod liver oil – did not reduce the risk of all-cause acute respiratory infections (ARI) in general, and Coronavirus, in particular.

Neither study found that there exists any preventive effect from COVID after supplementation with vitamin D.

Read more: Coronavirus: Post-COVID there can be complications in brain, says AIIMS doctor; know about the 'FAST' stroke testREADMORE

04/6Some contradictory findings

Some contradictory findings

A study done in 2020 in Mexico City contradicts these findings. In this study, health professionals were given either 4,000 IU of vitamin D a day or a placebo. Researchers found that there were, in fact, protective effects from the vitamin, effective in one month.

The recent studies' authors argue that the 2020 study was done before vaccinations were widely available. "We can be completely sure that vaccination is way more effective than vitamin D which probably does not prevent COVID-19 at all," a study author noted.

Two more clinical trials that are underway in the United States and Canada will further clarify the stance of vitamin D supplementation in COVID prevention.

READMORE

05/6Significance of vitamin D

According to research, vitamin D deficiency impairs the immune system. Some studies have also found that vitamin D supplement helps to calm immune system overreaction in case of respiratory virus infections.

The problem with vitamin D supplementation is that unlike vitamin C, vitamin D is a fat-soluble vitamin that can 'build up' in the system. This means your body is not able to utilize the supplements you are taking and the buildup can lead to toxicity if you continue taking the supplements over long periods.

Read more: Bowel cancer symptoms: How your poop and its frequency tells whether you should be testedREADMORE

06/6Key takeaway

Key takeaway

"The major takeaway is that for people in general, a vitamin D supplement did not prevent COVID-19, serious COVID-19 or symptomatic acute respiratory tract infections," said study author Dr. Arne Sjøraas, a researcher in the department of microbiology at Oslo University Hospital in Norway.

In case you observe signs of vitamin D deficiency, it is best to get tested and know about your vitamin D levels. Consult your doctor in case you require supplementation and stick to the dosage they mention as overdosage can have harmful effects on your health.

Type 1.5 diabetes

Type 1.5 diabetes: How is it different from type 1, type 2 diabetes? (The Times of India:20220909)

<https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/type-1-5-diabetes-how-is-it-different-from-type-1-type-2-diabetes/photostory/94072557.cms>

A lot of people believe that there are two kinds of diabetes namely type 1 and type 2. Interestingly, there is another type that does not fit into both these groups, which is type 1.5 diabetes, also called latent autoimmune diabetes in adults (LADA). It is a condition that has some properties and characteristics of both type 1 and type 2 diabetes. However, it is said to share more commonalities with type 1 than type 2. Like type 1 diabetes, type 1.5 has an autoimmune component, wherein your pancreas stops producing adequate insulin, and mistakenly damages the insulin-producing cells in the pancreas.

Also read: Cervical cancer is one of the major causes of cancer mortality in India: Experts shed light on this as first homegrown vaccine is launched [READMORE](#)

02/5 What causes LADA or type 1.5 diabetes?

What causes LADA or type 1.5 diabetes?

There is no way to determine why the antibodies that are usually there to protect our immune system from harmful pathogens go rogue and start to destroy the body's own insulin-producing cells.

However, experts believe it could be attributed to genetics such as a family history of autoimmune conditions. Furthermore, environmental triggers could also be to blame. Factors like obesity or being overweight, viral infections and stress have been linked to type 1.5 diabetes, but researchers have not yet reached a conclusion.

Also read: Bowel cancer symptoms: How your poop and its frequency tells whether you should be tested

LADA is diagnosed during adulthood and happens to set in gradually like type 2 diabetes. But the two are very different because LADA is an autoimmune disease and isn't reversible with changes in diet and lifestyle.

While it shares certain similarities with type 1 diabetes, given that it has autoimmune components, it proceeds gradually and therefore, the symptoms may be very vague. However, some of the tell-tale signs include: increased urination, increased thirst, blurred vision, unexplained weight loss and increased yeast infections.

04/5 How is it diagnosed?

As discussed, type 1.5 diabetes usually occurs in adulthood, specifically in people over 40, which is why it is often misunderstood with type 2 diabetes.

Nevertheless, the primary step in diagnosing the condition is to check for abnormally high blood sugar levels. But this will not determine which type of diabetes you have, which is why you may have to take a test to determine the presence of glutamic acid decarboxylase antibodies (GAD), which will indicate an immune system attack. Also, GAD is an antibody that destroys insulin-producing pancreatic cells in people with type 1.5.

05/5 The role of insulin

The role of insulin

Just like type 1 diabetes, type 1.5 diabetes results from your body not producing enough insulin. However, because it sets in gradually, oral medications can help during the initial treatment process.

Unlike type 1 diabetes, people diagnosed with LADA do not need insulin for several months up to years after being diagnosed. By controlling blood sugar levels with diet, exercise and maintaining a healthy weight, one can manage type 1.5 diabetes. But as the body loses its ability to produce insulin, they will need insulin shots.

'Heteropaternal Superfecundation'

महिला ने दिया जुड़वां बच्चों को जन्म, पर दोनों के पिता अलग, जानें क्या है 'Heteropaternal Superfecundation'

विशेषज्ञों का कहना है कि यह हेट्रोपैरेंटल सुपरफेक्यूंडेशन का मामला है, जो एक दुर्लभ स्थिति है। इसमें जन्म होने वाले दोनों जुड़वां बच्चों में अलग-अलग पिता का डीएनए पाया जाता है। असामान्य गर्भावस्था के (Hindustan:20220909)

<https://www.livehindustan.com/lifestyle/health/story-mind-bending-surprise-know-what-is-heteropaternal-superfecundation-occurs-woman-get-pregnant-by-two-different-fathers-at-the-same-time-7055170.html>

महिला ने दिया जुड़वां बच्चों को जन्म, पर दोनों के पिता अलग, जानें क्या है 'Heteropaternal Superfecundation'

पुर्तगाल में एक चौंकाने वाला मामला सामने आया है। यहां की रहने वाली एक 19 वर्षीय महिला ने जुड़वां बच्चों को जन्म दिया है। चौंकाने वाली बात यह है कि दोनों बच्चों के पिता अलग-अलग हैं। मेडिकल साइंस में ऐसी घटनाएं काफी दुर्लभ मानी जाती हैं।

दुनियाभर में 20वां ऐसा मामला-

दरअसल, जन्म के करीब आठ महीने बाद पिता ने बच्चों का डीएनए टेस्ट कराया। जब रिपोर्ट आई तो इस बात का खुलासा हुआ कि वो व्यक्ति सिर्फ एक ही बच्चे का पिता है। दूसरे बच्चे का पिता कोई और है। हालांकि, दोनों बच्चे देखने में एक जैसे ही हैं। विशेषज्ञों ने बताया कि विज्ञान की भाषा में इसे हेट्रोपैरेंटल सुपरफेक्यूंडेशन की स्थिति कहते हैं। यह पूरी दुनिया में हेट्रोपैरेंटल सुपरफेक्यूंडेशन का केवल 20वां ज्ञात मामला है।

क्या है हेट्रोपैरेंटल सुपरफेक्यूंडेशन

विशेषज्ञों का कहना है कि यह हेट्रोपैरेंटल सुपरफेक्यूंडेशन का मामला है, जो एक दुर्लभ स्थिति है। इसमें जन्म होने वाले दोनों जुड़वां बच्चों में अलग-अलग पिता का डीएनए पाया जाता है। असामान्य गर्भावस्था के तरीके का अध्ययन करने वाले डॉ. टुलियो जॉर्ज फ्रेंको ने बताया कि ऐसी स्थिति तब बनती है जब मां के शरीर में मौजूद अंडे दो अलग-अलग पुरुषों के जरिए फर्टिलाइज हो जाते हैं। महिला ने भी यह बात स्वीकार की है कि उसने दो अलग-अलग पुरुष के साथ संबंध बनाए थे। यानी वह दो अलग-अलग पुरुषों के साथ रिलेशनशिप में थी। यही बच्चों में अलग-अलग डीएनए की वजह बने हैं।