



# **DAILY NEWS BULLETIN**

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY  
Monday **20190610**

**PMJAY (The Asian Age: 20190610)**

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13160202>

# Modi 2.0 eyes big push for allopathy, Ayush integration

RAHUL CHHABRA  
NEW DELHI

Having delivered on its previous poll promise by rolling out Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) in its first term, Narendra Modi 2.0 is all set to strengthen the mega public health initiative by integrating traditional medical therapy with allopathy at public health centres (PHCs) in a big way to arrest rising chronic diseases such as diabetes and obesity.

Union Ayush minister Shripad Naik recently said, "All PHCs (renamed as wellness and health centres) will now have Ayush doctors besides allopathy practitioners. People would be introduced to alternative medicine through such measures."

The need to appoint Ayush doctors has been increasingly felt at the PHCs level following the success of a pilot project launched in 2016 in three districts — Bhilwara (Rajasthan), Surendranagar (Gujarat) and Gaya (Bihar) — wherein targeted beneficiaries are being given ayurveda drugs, dietary regimen and yoga classes to treat non-communicable diseases.

For instance, the CSIR developed anti-diabetic ayurvedic drug BGR 34 has proved a milestone in curing diabetic disease, a Council of Scientific and Industrial Research's (CSIR) official said.

Replying to a written question in the Rajya Sabha in the previous term, Mr Naik too had said that jointly developed after standardisation and pre-clinical studies by the CSIR's two labs — Central Institute of Medicinal and Aromatic Plants (CIMAP) and National Botanical Research Institute (NBRI), BGR-34 is meant to be used by patients of newly diagnosed diabetes only as a measure of management of the disease. The drug is marketed by Delhi-based AIMIL Pharmaceuticals. "BGR-34 is a natural DPP-4 (dipeptidyl peptidase 4) inhibitor with no side effects," said Sanchit Sharma from AIMIL.

DPP-4 inhibitors are a class of drugs used to lower blood sugar in adults with Type-2 diabetes.

CSIR officials said that BGR-34 is a scientifically developed drug that has been produced by completing various medical tests and is proving very beneficial in controlling diabetes.

In view of the rising chronic lifestyle diseases, the Ayush ministry is also in the process of identifying 12,500 wellness and health centres

## NATURAL HEALING

► In view of the rising chronic lifestyle diseases, the Ayush ministry is in the process of identifying 12,500 wellness and health centres across the country for offering Ayush services

**Nipah Cases (The Asian Age: 20190610)**

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=13160242>



People, chosen after draw of lots, collect water from a community well at Eswari Nagar in Pallavaram municipality in Chennai on Sunday.

— PTI

## No new cases of Nipah in Kerala: Health minister

**New Delhi, June 9:** Union Health minister Harsh Vardhan on Sunday said no new case of Nipah virus infection has been reported in Kerala and informed that the clinical condition of the patient suffering from the disease, the only case this year, is improving.

A case of Nipah was reported from Kerala's Ernakulam district on June 3 and the condition of the infected college student is improving, Mr Vardhan said.

The Nipah virus had claimed 17 lives in the state in May last year.

As on Sunday, blood and serum samples of all seven suspected patients



Dr Harsh Vardhan

who were admitted at a quarantine facility at the Government Medical College in Kerala's Ernakulam district have tested negative for the virus, while the sample from the eighth patient is being tested, the minister said.

On Saturday, four patients from the isolation

unit were discharged as their clinical condition improved.

National Institute of Virology (NIV), Pune has collected three blood samples from pigs and about 30 samples from bats from Thodupuzha in Idukki district of the state for testing.

Experts from National Institute of High Security Animal Diseases (NIH-SAD) in Bhopal are supporting Kerala's Animal Husbandry Department in the investigation. Multi-disciplinary central teams, including experts from the NCDC, AIIMS and ICMR, are deployed to support the state.

— PTI

## **No new Nipah case**

### **No new Nipah case in Kerala: Health ministry (Hindustan Times: 20190610)**

<http://paper.hindustantimes.com/epaper/viewer.aspx>

With no new Nipah Virus Infection case reported from Kerala, the experts are now focusing on determining the primary source of infection. The experts from the National Institute of Virology (NIV), Pune, have lifted blood samples from three pigs and about 30 bats from Thodupuzha (Idukki district) in the state.

#### **PTI FILE**

This is second year in a row that Nipah Virus Infection has been reported from the state.

“Since there is no other case reported so far, there is a possibility that it was a case of animal-to-human transmission. However, at this stage it is a mere conjecture and it needs to be established with evidence. The experts on ground are trying to establish the source,” said a senior health ministry official, requesting anonymity.

The expert team rushed on ground comprises a physician from department of medicine, All India Institute of Medical Sciences (AIIMS), Delhi, a neurologist from NIMHANS, Bengaluru, a virologist from NIV’s Alleppey branch in Kerala, a public health expert and a microbiologist from National Centre for Disease Control (NCDC), Delhi and an entomologist (insect expert) from NCDC’s Kozhikode branch.

Meanwhile, the clinical condition of the 23-year-old patient who tested positive for the infection, is improving.

Eight patients are still in the isolation ward and seven of them were found negative for the Nipah Virus. The sample from the 8th patient is being tested in the point of Care (POC) lab.

Four other people from the isolation were discharged on Friday as their symptoms improved.

“There’s no new case, and the centre is supporting the Kerala state government in management and containment of the situation,” said Union health minister Harsh Vardhan, in a statement.

This is second year in a row that Nipah Virus Infection has been reported from the state. Last year, 17 people died and 18 were infected with the disease.

## First Gene –edited (The Asian Age: 20190610)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13160282>

LIVING | CONTRADICTION **Higher death rate found in people with over two mutated copies of gene**

# First gene-edited babies at early death risk

Los Angeles, June 9: The world's first babies whose genes were reportedly altered to help them fend off HIV infection are more likely to die younger, a study claims.

According to an analysis by scientists from University of California (UC) Berkeley in the US, the controversial genetic mutation that a Chinese scientist attempted to create in twin babies born last year is associated with a 21 per cent increase in mortality in later life.

The researchers scanned more than 400,000 genomes and associated health records contained

in a British database, UK Biobank, and found that people who had two mutated copies of the gene had a significantly higher death rate between ages 41 and 78 than those with one or no copies.

Previous studies have associated two mutated copies of the gene, CCR5, with a four-fold increase in the death rate after influenza infection, and the higher overall mortality rate may reflect this greater susceptibility to death from the flu.

However, the researchers said there could be any number of explanations, since the protein that

**THE DANGERS**

**21% increase in mortality later on in life in twin babies born last year with a controversial genetic mutation by Chinese scientist**

**In CRISPR babies, with current knowledge, it is still very dangerous to try to introduce mutations without knowing the full effect of what those mutations do.**

**— RASMUS NIELSEN, professor, UC Berkeley**

CCR5 codes for, and which no longer works in those having the mutation in both copies of the gene, is involved in many body functions.

"Beyond the many ethi-

cal issues involved with the CRISPR babies, the fact is that, right now, with current knowledge, it is still very dangerous to try to introduce mutations without knowing the full

effect of what those mutations do," said Rasmus Nielsen, a professor at UC Berkeley. "In this case, it is probably not a mutation that most people would want to have. You are actually, on average, worse off having it," said Nielsen.

"Because one gene could affect multiple traits, and because, depending on the environment, the effects of a mutation could be quite different, I think there can be many uncertainties and unknown effects in any germline editing," said postdoctoral fellow Xinzhu Wei, first author of the research published in the journal *Nature Medicine*.

The gene CCR5 codes for a protein that, among other things, sits on the surface of immune cells and helps some strains of HIV to enter and infect them.

Jiankui He, the Chinese scientist who announced he had experimented with CCR5 on at least two babies, said he wanted to introduce a mutation in the gene that would prevent this. Naturally-occurring mutations that disable the protein are rare in Asians, but a mutation found in about 11 per cent of Northern Europeans protects them against HIV infection. — *PTI*

## Brain Tumor (The Asian Age: 20190610)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13159461>

# A BLOW TO THE HEAD

A recent study shows that there is a rise in the number of brain tumour cases in India. Early detection of tumours would yield better outcomes.

## AGE CORRESPONDENT

 Watching Dr Derek Shepherd also known as Dr McDreamy on *Grey's Anatomy* performing complex brain surgeries is exciting and fun. But what happens when something that seemed like a distant figment of televised drama has now become reality- the rapid rise of a brain tumour in India and its chilling implication towards the goal of complete health that the nation aspires to attain. This alarming rise throws a conclusive light on the state of neurological diagnosis and cure of the nation, where a proactive approach needs to be adopted both on governmental as well as private/individual levels.

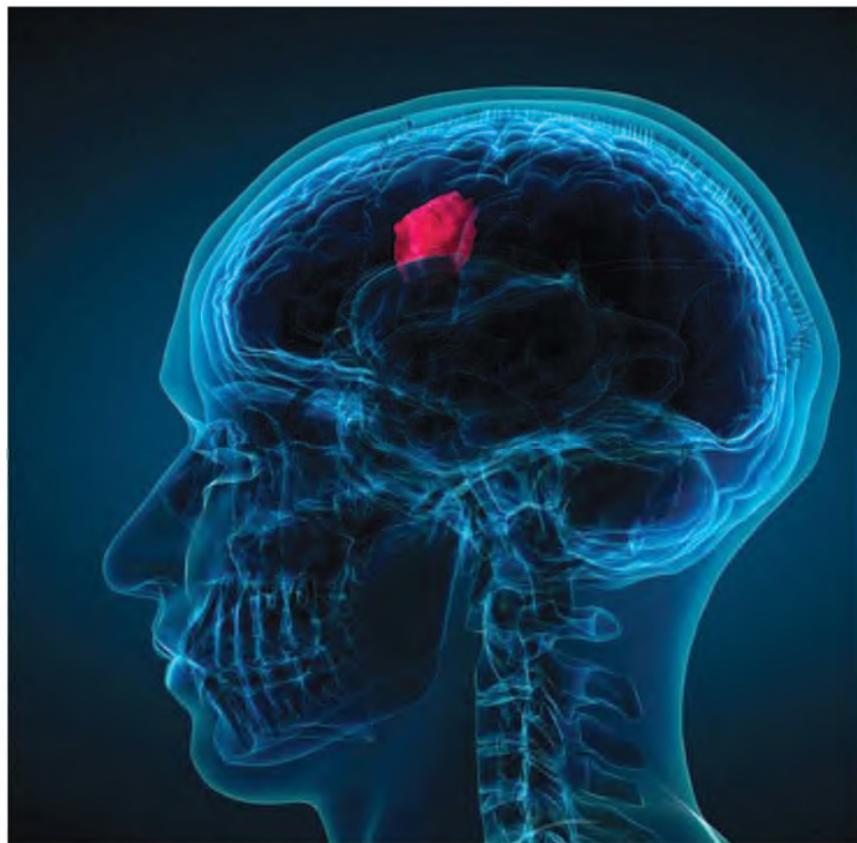
As a recent development, it is observed that close to 40,000-50,000 patients are afflicted by this killer disease, baffling the medical fraternity to no ends. Patients of all ages and socio-economic background are piling up in hospitals with tumours at various stages, with a shortage of staff dealing with these neurological upsurges.

Brain tumours are an abnormal growth of cells in the brain that can spread aggressively to distant parts of the body as well.

Tumours that do not spread or invade nearby tissue are called benign, while that one that spread rapidly are called malignant. While benign tumours are less harmful as compared to malignant ones, yet don't be rest assured- a benign tumour can cause problems in the brain by pressing on nearby tissue and hence need early diagnosis.

"Tumours of the brain constitute approximately 2% of all malignancies, with the associated morbidity and mortality contributing a major dent to the cause of complete health in India", said Dr Vivek Vaidya, Director Neurosurgery, Fortis Escorts Jaipur.

According to several stud-



ies, risk factors for brain tumours are ionizing radiation, from high dose X-Rays such as radiation therapy and other sources.

Dr Vaidya goes on to add, "The often cause cell damage, which automatically leads to the formation of a tumour. Other risk factors like a small number of cases have been documented in medical history where there are families that have several members with brain tumours."

Symptoms include repeated episodes of vomiting and a morning headache. Brain scans are a viable way to detect this early, making it

an impetus to make neuro-surgical healthcare more congruent.

Yet there is a light at the end of the dark tunnel- treatment is possible and accessible.

Correct diagnosis is based on the size of the tumour, a long with the general health condition of the patient, making it integral for early brain scans.

While it has been found that certain tumours can't be surgically removed owing to their location in the brain, medication,

chemotherapy and radiation options are often opted for killing and shrinking the tumours.

Here, early detection and treatment yield better outcomes. If the cases are detected early, then 90 per cent of benign brain tumours are curable. "Early diagnosis is the first offence towards combating this rise, as it increases the chance of timely action and recovery. Yet often, the location of the tumour proves to be a deterrent, owing to the sensitive road map of the brain. For such deep-seated tumours, deep-seated surgery is one of the options. This surgery involves open brain surgery as well as one done through the nose, with 100% success rate," said Dr Hemant Bhartiya, Neurosurgeon.

**Brain tumours constitute 2% of all malignancies, with the associated morbidity and mortality leads to a major dent towards the cause of health hazards**

**Antibiotics (The Asian Age: 20190610)**

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13159478>

# ALARM OVER ANTIBIOTICS

THE RISING RATES OF ANTIBIOTIC RESISTANCE THE WORLD OVER ARE FAST TURNING INTO A MAJOR HEALTH CONCERN FOR DOCTORS AND PATIENTS ALIKE

JOYEETA BASU

Doctors in Hyderabad have expressed concern over a recent study that shows two out of three healthy Indians are antibiotic resistant.

They say it is a serious public health problem as some bacteria that are capable of causing serious disease are becoming resistant to commonly available antibiotics, which means that treating infections in people is becoming a much harder process.

The study published by *The Indian Council of Medical Research (ICMR)* analysed 207 healthy individuals, of which 139 were found resistant to one or more classes of antibiotics.

Doctors explain why the results are such a huge cause for concern.

## Q Worrying results

Speaking of his personal experience with patients, Dr J Anish Anand, Consultant, Internal Medicine at Apollo Hospitals, Jubilee Hills says it has become very common to see blood and urine culture reports with antibiotic resistance to at least one antibiotic.

"The bacteria which used to previously respond to a simple antibiotic is now resistant even to the highest one. This means that if one gets an infection, it could in some instances, have no cure at all or only through very few antibiotics," he explains.

Dr Manmohan Gavvala, consultant dermatologist at Apollo Hospitals in Hyderguda agrees that increased resistance could mean the use of higher drugs in patients in the future, cautioning that it could also have greater side-effects.

## Q Why is it happening?

According to doctors, the study reflects the sorry state of unnecessary antibiotic usage in India.

One of the most common reasons of antibiotic resistance is the non-judicious use of antibiotics for simple ailments like viral fever and common cold. It is also because of the increased use of antibiotics in poultry and other animals that people eat, says Dr Anand.

"It's a fact already known since several years. There is an urgent need for taking corrective measures. Over-the-counter usage of



antibiotics should especially be stopped," he states.

Dr Gavvala explains that the situation is even more worrying in developing countries like India since antibiotics are easily available without a prescription from medical shops.

"The main cause of developing antibiotic resistance is irrational use of antibiotics without the prescription of a medical practitioner for inadequate periods of

time, which in turn leads to resistance," he explains.

## Q Worldwide issue

Alarmingly, the issue is rapidly becoming a worldwide problem.

Last year, The World Health Organisation (WHO) revealed high levels of resistance to a number of serious bacterial infections in both high-and-low-income countries. WHO's Global

Antimicrobial Surveillance System revealed widespread occurrence of antibiotic resistance among 500,000 people with suspected bacterial infections across 22 countries. "The report confirms the serious situation of antibiotic resistance worldwide," says Dr Marc Sprenger, director of WHO's Antimicrobial Resistance Secretariat.

According to Dr Anand, one of the ways to combat it is to regulate antibiotic usage across several industries like poultry, as also among the general public. This can be done through education and advertising, he says, adding that "highlighting the costs involved by their unnecessary usage will also help."

Another way to combat the menace is to ensure that they are sold by medical pharmacies strictly on prescriptions from registered medical practitioners, Dr Gavvala adds.

"Patients should not be encouraged to repeat the course or give it to friends and family without the advice of a physician, who should also use antibiotics judiciously and only when required," says Dr Gavvala.

Further, he says, "Whenever possible, it is better to do a culture sensitivity test before prescribing antibiotics. If we follow these methods, we may be successful in reducing the antibiotic resistance in our society."

In fact, he adds that though normal non-pathogenic bacteria are commonly seen in the human body, they are harmless and may actually help the body in preventing the growth of pathological bacteria.

## WHAT IS ANTIBIOTIC RESISTANCE?

- The World Health Organisation (WHO) describes antibiotics as medicines used to prevent and treat bacterial infections.
- Antibiotic resistance occurs when bacteria change in response to the use of these medicines, which means the bacteria, not humans, become antibiotic-resistant.
- When these bacteria infect humans, the infections they cause become harder to treat than those caused by non-resistant bacteria.



**Physical and Mental Stress (The Asian Age: 20190610)**

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=13159477>

## Ask a doc



## TRY TO AVOID PHYSICAL AND MENTAL STRESS

**Q** *I am a 48-year-old type 2 diabetic with stage 3 chronic kidney disease. My creatinine is 2.2, urine protein is 127mg/24 hours and urinary creatinine is 45.4mg/100ml. My haemoglobin is 14.2, blood sugar fasting - 127 and PP - 240. I had taken a lot of painkillers in my earlier days, which might be causing my kidney failure now. I am also having gout. Do I need dialysis?*

— Veera Reddy

You do have stage 3 chronic kidney disease (CKD) characterised by irreversible loss of approximately 60% of kidney function at your age. To ascertain the exact cause of CKD and also know about the severity of the disease process, one would need to perform a kidney biopsy. The focus should remain on strict blood pressure control, avoiding exposure to potential kidney toxic medications like Voveran and Nimulid and close monitoring and treatment of CKD complications like anaemia and bone disease. The goal is to delay the progression to End Stage Renal Disease (ESRD), the stage characterised by dialysis requirement once there is a loss of >90% of normal kidney function.

— Dr P. Vikranth Reddy,

## **Type 2 diabetes**

### **Early signs of type 2 diabetes in teens can be detected using microRNA: Study (New Kerala: 20190610)**

<https://www.newkerala.com/news/read/155563/early-signs-of-type-2-diabetes-in-teens-can-be-detected-using-microrna-study.html>

A recent study has found how exosomes, tiny nanoparticles released from fat cells, travel through the bloodstream and can help detect type 2 diabetes in teens.

The study was discussed in an annual meeting - ADA 2019.

The exosomes are important in lean, healthy individuals in maintaining homeostasis, but when fat gets 'sick' - the most common reason for this is too much weight gain - it can change its phenotype, becoming inflammatory, and disrupts how our organs function, from how our skeletal muscle and liver metabolize sugar to how our blood vessels process cholesterol.

The researchers were curious about what this process looked like in teens who fell in the mid-range of obesity.

Obesity is a major risk factor for insulin resistance and type 2 diabetes, but the researchers wanted to know why do some teens with obesity develop type 2 diabetes over others? Why are some teens in this mid-range of obesity metabolically healthy while others have metabolic syndrome? Can fat in obese people become sick and drive disease?

The theory was tested with 55 obese adolescents, ages 12 to 17, as part of a study at Children's National.

The participants - 32 obese normoglycemic youth and 23 obese hyperglycemic youth - were similar in age, sex, race, pubertal stage, body mass index and overall fat mass. The distinguishing factor the hyperglycemic study participants, the teens with elevated blood sugar, differed in where they stored fat. They had extra visceral fat (or adipose tissue) storage, the type of fat that surrounds the liver, pancreas and intestines, a known risk factor for type 2 diabetes.

The researchers predicted that circulating exosomes from teens with elevated blood sugar are enriched for microRNAs targeting carbohydrate metabolism.

For the study, the researchers used three tests to examine study participants' metabolism, body composition and circulating exosomes. The first test, an oral glucose tolerance test, measures how efficiently the body metabolizes sugar; the second test is the whole body DXA, or dual-energy x-ray absorptiometry, which analyzes body composition, including lean tissue, fat mass and bone mineral density; and the third test, the serum adipocyte-derived exosomal microRNA assays, is an analysis of circulating fat signals in the bloodstream.

The study found that teens with elevated blood sugar and increased visceral fat had different circulating adipocyte-derived exosomes.

Dr Freishtat, one of the researchers, imagines that this information will be especially helpful for a patient in a mid-range of obesity. In the current study, the altered RNAs affect P13K/AKT and STAT3 signalling, vital pathways for metabolic and immune function.

"Instead of waiting until someone has the biochemical changes associated with type 2 diabetes, such as hyperglycemia, hyperlipidemia and insulin resistance, we're hoping physicians will use this information to work with patients earlier," says Dr Freishtat.

He went on to say, "Through earlier detection, clinicians can intervene when fat shows sign of illness, as opposed to when the overt disease has occurred. This could be intervening with diet and lifestyle for an obese individual or intervening with medication earlier. The goal is to work with children and teens when their system is more plastic and responds better to intervention."

"It's important for families to know that these studies are designed to help researchers and doctors better understand the development of disease in its earliest stages, but there's no need for patients to wait for the completion of our studies," he added.

"Reaching and maintaining healthy body weight and exercising are important things teens and families can do today to reduce their risk of obesity and diabetes."

## **Diet influence**

### **How does diet influence diabetes risk? (New Kerala: 20190610)**

The kind of food one eats and even the order in which it is consumed can affect the risk of developing type 2 diabetes.

The studies are being presented at the meeting 'Nutrition 2019' in Baltimore.

In a study of 2,717 young adults in the United States with long-term follow-up, people who increased the amount of fruits, vegetables, whole grains, nuts, and vegetable oils in their diet over 20 years had a 60 per cent lower risk of type 2 diabetes compared to those with a small decrease in plant foods. The findings suggested that long-term shifts towards a more plant-centered diet could help prevent diabetes.

Other findings suggested that people with higher intakes of vitamins B2 and B6 from food or supplements have a lower risk for type 2 diabetes. The study, which included more than 200,000 people, also revealed that consuming higher levels of vitamin B12 from foods was associated with a higher type 2 diabetes risk, which may be due to the consumption of animal products.

According to another study changing the order in which food is eaten could reduce post-meal blood sugar spikes.

The researchers found that eating rice first and then a vegetable and meat caused significantly higher blood sugar levels after eating compared to other sequences.

The results point to a simple but effective way to lower blood sugar levels after eating, which could prevent the transition from prediabetes to diabetes.

## **Food and Nutrition**

### **Here's why you need to increase your fruit, vegetable intake(New Kerala: 20190610)**

Here's another reason for you to gorge on fruits and veggies. A new study has claimed that insufficient consumption of fruit and vegetable may account for millions of death from heart disease and strokes each year.

The study presented at the meeting 'Nutrition 2019' in the Baltimore Convention Center, estimated that roughly 1 in 7 cardiovascular deaths could be attributed to not eating enough fruit and 1 in 12 cardiovascular deaths could be attributed to not eating enough vegetables.

Low fruit intake resulted in nearly 1.8 million cardiovascular deaths in 2010, while low vegetable intake resulted in 1 million deaths, according to researchers.

Overall, the toll of suboptimal fruit intake was almost double that of vegetables. The impacts were most acute in countries with the lowest average intakes of fruits and vegetables.

"Fruits and vegetables are a modifiable component of the diet that can impact preventable deaths globally," said Victoria Miller, lead study author of the study.

"Our findings indicate the need for population-based efforts to increase fruit and vegetable consumption throughout the world," added Miller.

"Global nutrition priorities have traditionally focused on providing sufficient calories, vitamin supplementation and reducing additives like salt and sugar," said Dariush Mozaffarian, senior author of the study.

"These findings indicate a need to expand the focus to increasing availability and consumption of protective foods like fruits, vegetables and legumes--a positive message with tremendous potential for improving global health," Mozaffarian added.

Based on dietary guidelines and studies of cardiovascular risk factors, the researchers defined optimal fruit intake as 300 grams per day, equivalent to roughly two small apples. Optimal intake of vegetables, including legumes, was defined as 400 grams per day, equivalent to about three cups of raw carrots.

The researchers estimated average national intakes of fruit and vegetables from diet surveys and food availability data representing 113 countries (about 82 percent of the world's population), then combined this information with data on causes of death in each country and data on the cardiovascular risk associated with inadequate fruit and vegetable consumption.

The impact of inadequate fruit and vegetable intake was greatest in countries with the lowest fruit and vegetable consumption. Countries in South Asia, East Asia and Sub-Saharan Africa had low fruit intake and high rates of associated stroke deaths. Countries in Central Asia and Oceania had low vegetable intake and high rates of associated coronary heart disease.

By age group, suboptimal fruit and vegetable intake had the greatest perceived proportional impact on cardiovascular disease deaths among younger adults. By gender, suboptimal fruit

and vegetable intake had the greatest proportional impact on cardiovascular disease deaths in men, likely because women tend to eat more fruits and vegetables, Miller noted.

## **Poor nutrition**

### **Poor sleep associated with poor nutrition: Study (New Kerala: 20190610)**

Poor nutrition leads to poor sleep, a new study has found, while highlighting that a greater number of nutrients were associated with poor sleep in women than in men.

However, this number could be reduced if women took dietary supplements.

The study will be presented at the meeting 'Nutrition 2019' in Baltimore.

"This work adds to the body of growing evidence associating specific nutrient intakes with sleep outcomes," said Chioma Ikonte, study's lead author.

"Our findings suggest that individuals with short sleep duration might benefit from improving their intake of these nutrients through diet and supplementation," Ikonte added.

In addition to the findings on sleep duration, the research suggested nutrients may also play a role in sleep disorders, poor sleep quality and trouble falling asleep.

Micronutrients are vitamins and minerals that our bodies require but do not produce. As a result, they must come from our diet. Globally, billions of people suffer from at least one micronutrient deficiency.

Previous studies have demonstrated important roles for micronutrients in growth and development, disease prevention and healing, and normal bodily functions, including sleep. Magnesium, for example, helps the body produce melatonin and other compounds involved in sleep. Some studies suggest zinc plays a role in sleep regulation.

"Whether chronic short sleep causes nutrient insufficiency or the nutrient insufficiency causes short sleep still needs to be determined," said Ikonte.

"A clinical study that investigates [impacts of] supplementation with these nutrients on sleep outcomes is needed to demonstrate cause and effect," Ikonte added.

## **Diet**

### **Study reveals how diet affects children's brain (New Kerala: 20190610)**

<https://www.newkerala.com/news/read/155429/study-reveals-how-diet-affects-childrens-brain.html>

A new study has found how diet, water intake and beverages like coffee affect a child's brain.

The study will be presented at the meeting, 'Nutrition 2019' in Baltimore, and showed an analysis of more than 850 elementary school children.

According to the findings of the study, children who reported higher consumption of snacks and sugar-sweetened beverages scored lower on standardized academic tests, than children who consumed less of these foods.

However, unhealthy diets were not linked to lower cognitive test scores in kids.

Also, the study suggested that children with greater habitual hydration performed better during tasks requiring cognitive flexibility.

In addition, children showed improvements in their hydration levels and working memory after consuming a higher amount of water--2.5 litres daily--than when instructed to drink just half a litre per day.

Undernutrition, prevalent among young children worldwide can harm children's development. In a randomized controlled trial conducted in 26 Indian villages, infants who received a multiple micronutrient powder, an early learning intervention, or both, showed significant improvements in expressive language, visual reception, and social-emotional behavior compared with those receiving a placebo.

Researchers also studied the effects of Caffeine and L-theanine, substances found in tea leaves, in children with Attention Deficit Hyperactivity Disorder (ADHD),

They found five boys with ADHD showed better-sustained attention, improved cognitive performance and decreased impulsivity when taking caffeine and L-theanine supplements together compared to a placebo.

## **Tuberculosis patients**

### **Sun-exposed oyster mushrooms helpful for tuberculosis patients: Study (New Kerala: 20190610)**

<https://www.newkerala.com/news/read/155413/sun-exposed-oyster-mushrooms-helpful-for-tuberculosis-patients-study.html>

A recent study highlighted the death rate caused due to Tuberculosis in low-income countries and also how the consumption of sun-exposed oyster mushrooms is beneficial for TB patients.

The study was discussed in an annual meeting ' Nutrition 2019' held from June 8-11 in Baltimore.

TibebeSelassie Seyoum Keflie, one of the researchers said, "TB is becoming more difficult to fight due to the emergence of drug-resistant strains, creating an urgent need for new treatments that can support first-line drugs."

"This source of vitamin D is ideal for low-income countries because mushrooms can easily be distributed and administered in a safe, low-cost, easy-to-replicate manner," the researcher added.

The studies have shown that vitamin D induces the body to help the formation of an antimicrobial compound that attacks the bacterial cause of TB. Although sun exposure can boost a person's vitamin D levels, it must be obtained through diet when sun exposure is scarce.

The researchers used oyster mushrooms because they offer a cheap, safe and readily available source of vitamin D that is easily absorbed by the body. Although fresh oyster mushrooms contain almost no vitamin D, the fungus produces it after exposure to sunlight much like the human body.

"This is the first time that vitamin D derived from oyster mushrooms exposed to sun has been shown to be a potential adjunctive therapy for TB," said Keflie.

"With educational outreach, it might be possible to teach people with TB to irradiate their own mushroom for a brief period before cooking," he added.

To study it further, the researchers gave a group of TB patients sandwich bread containing 146 micrograms of vitamin D from sun-exposed oyster mushrooms every morning during the first four months in which they received an anti-TB drug.

At the end of the four months, 95 per cent of patients receiving the fortified bread were classified with the lowest TB severity score on a scale of 1 to 5. The treatment group had significantly higher vitamin D levels compared to patients not receiving the bread, with more than a third of them no longer showing a vitamin D deficiency. The researchers also observed that patients who consumed the fortified bread had significant improvements in immunological responses over the four months.

## **Mental health of disaster**

### **Disturbed sleep affects mental health of disaster survivors (New Kerala: 20190610)**

Mental health of disaster

Disturbed sleep affects mental health of disaster survivors

<https://www.newkerala.com/news/read/155361/disturbed-sleep-affects-mental-health-of-disaster-survivors.html>

Sleep disturbances are associated with mental health problems among survivors of a natural disaster even two years after the tragedy, according to a study.

Published in the journal *Sleep*, the study involved 165 participants (52 per cent men) with an average age of about 31 years. Participants were living in Port-au-Prince, Haiti, one of the areas affected by the 2010 earthquake.

According to the survey, it was the most devastating earthquake in the country's history. The disaster killed almost 200,000 people and displaced more than 1 million residents.

"This is one of the first epidemiological studies to investigate the prevalence of sleep disturbances among survivors of the 2010 Haiti earthquake," said study lead author Judite Blanc from the New York University.

"Our study underscores the strong association between common trauma-related disorders and comorbid sleep conditions among a group of survivors," Blanc said.

The researchers surveyed survivors for two years after the earthquake and found that 94 per cent participant reported experiencing insomnia symptoms and subsequent risk after the disaster.

Two years later, 42 per cent showed clinically significant levels of post-traumatic stress disorder (PTSD), and nearly 22 per cent had symptoms of depression. Resilience did not appear to be a buffer against sleep disturbance.

"Findings from our study highlight the need to assess and treat sleep issues among disaster survivors, as they are highly prevalent after a natural disaster and are related to mental health conditions, our work supports the importance of sleep in disaster preparedness programs globally," said Blanc.

## **Junk food consumption**

### **Junk food consumption ups allergy risk in kids (The Tribune: 20190610)**

<https://www.tribuneindia.com/news/health/junk-food-consumption-ups-allergy-risk-in-kids/785473.html>

Junk food consumption ups allergy risk in kids

Researchers have found that high consumption of junk food such as microwaved foods and barbequed meats may be responsible for food allergies in children.

Researchers have found that high consumption of junk food such as microwaved foods and barbequed meats may be responsible for food allergies in children.

The study, presented at the 52nd Annual Meeting of the European Society for Paediatric Gastroenterology Hepatology and Nutrition, shows that high levels of advanced glycation end-products (AGEs) are associated with food allergies in kids.

AGEs are present in high levels in junk foods such as sugars, processed foods, microwaved foods and roasted or barbecued meats. They are known to play a role in the development and progression of different oxidative-based diseases including diabetes, atherosclerosis and neurological disorders, said the researchers.

For the study, the research team observed 61 children aged between 6 and 12 years. They were identified in three categories - those with food allergies, those with respiratory allergies and healthy controls.

The study revealed a significant correlation between AGEs and junk food consumption, said Roberto Berni Canani, Associate Professor at the University of Naples Federico II in Italy. — IANS

## Fruit and vegetables (Hindustan: 20190610)

[http://epaper.livehindustan.com/imageview\\_61905\\_68095152\\_4\\_1\\_10-06-2019\\_i\\_20.pagezoomsinwindows.php](http://epaper.livehindustan.com/imageview_61905_68095152_4_1_10-06-2019_i_20.pagezoomsinwindows.php)

नए अध्ययन के मुताबिक हृदयाघात से मौत के सात मामलों में एक का कारण खानपान

# फल-सब्जियां कम खाना जानलेवा



सेहत

मैरीलैंड (अमेरिका) | एजेसी

सब्जी और फलों की अहमियत से तो हम सभी वाकिफ हैं। लेकिन क्या आप जानते हैं इनका कम सेवन जानलेवा भी हो सकता है। एक ताजा अध्ययन में यह बात सामने आई है कि पर्याप्त मात्रा में सब्जी और फल न खाना हर साल लाखों लोगों को दिल की बीमारी का शिकार बना रहा है। यही नहीं बड़ी संख्या में लोग हृदयाघात जैसे कारणों से जान भी गंवा रहे हैं।

अमेरिका में बाल्टीमोर कन्वेंशन सेंटर में आयोजित 'पोषण-2019' बैठक में पेश अध्ययन के अनुसार, हार्टअटैक से होने वाली हर सात में से एक मृत्यु के का कारण मरीज का कम मात्रा में फल लेना होता है। जबकि हार्टअटैक से होने वाली 12 मौतों में एक में कारण पर्याप्त सब्जी न खाना होता है।

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लाख लोगों की मौत पर्याप्त फल न खाने से हुई 2010 में



10

लाख मौतें उसी वर्ष पर्याप्त सब्जी न खाने से हुई

प्रमुख अध्ययनकर्ता विक्टोरिया मिलर का कहना है कि फल और सब्जियां आहार का एक परिवर्तनीय घटक हैं जो आवश्यकता के हिसाब से अपनी क्षमता और आकार में बदलाव करते हैं। इससे दुनिया भर में होने वाली मौतों को रोका जा सकता है।

**जनसंख्या घटाने के प्रयास जरूरी:** अध्ययन में कहा गया है कि फल और

चेताता है यह अध्ययन

- फल न खाने से होने वाली मौत का आंकड़ा सब्जी न खाने से होने वाली मौतों से लगभग दोगुना
- औसतन कम फल और सब्जियों की खपत वाले देशों में ऐसी मौतों के मामले सबसे ज्यादा

- उम्र के हिसाब से युवा फल और सब्जी न खाने से हृदय रोग और मौतों के अधिक शिकार बने
- महिलाओं के मुकाबले पुरुषों में सब्जी व फल कम खाने के मामले अधिक, जिसका सेहत पर सीधा असर

कहां सबसे ज्यादा असर

फल-सब्जियों की पर्याप्त उपलब्धता न होने से दिल की बीमारी के कारण होने वाली मौतों के मामलों में दक्षिण अफ्रीका, पूर्वी एशिया, उपसहारा अफ्रीकी सबसे अधिक प्रभावित

सब्जी की उपलब्धता का महत्व सामने आने के बाद यह जरूरी है कि हर वर्ग के लोगों को ये उपलब्ध हो सके। इसके लिए दुनिया भर की सरकारों को जनसंख्या घटाने के गंभीर प्रयास करने होंगे, ताकि मंहगाई घटे और भुखमरी की स्थिति न बचे।

**फल, सब्जी व फलियों की खपत बढ़ाई जाए:** अध्ययन के वरिष्ठ लेखक

दारीश मोजफेरियन ने कहा कि वैश्विक पोषण प्राथमिकताओं में पारंपरिक रूप से कैलोरी, विटामिन बढ़ाने व नमक और चीनी को घटाने की बात होती थी। लेकिन उनके अध्ययन का निष्कर्ष है कि फलों, सब्जियों और फलियों जैसे सुरक्षात्मक खाद्य पदार्थों की उपलब्धता और खपत बढ़ाने पर ध्यान दिया जाए।

## Protein (Hindustan: 20190610)

[http://epaper.livehindustan.com/imageview\\_61905\\_68095772\\_4\\_1\\_10-06-2019\\_i\\_20.pagezoomsinwindows.php](http://epaper.livehindustan.com/imageview_61905_68095772_4_1_10-06-2019_i_20.pagezoomsinwindows.php)

# कैंसर से बचाएगा चमकने वाला प्रोटीन

मास्को | एजेंसी

वैज्ञानिकों ने एक नए चमकने वाले प्रोटीन की खोज की है जिसका इस्तेमाल फ्लूरोसेंस माइक्रोस्कोपी में कर कैंसर, संक्रामक रोगों और अंगों के विकास के बारे में और शोध किया जा सकता है।

रूस के मास्को इंस्टीट्यूट ऑफ फिजिक्स एंड टेक्नोलॉजी के शोधकर्ताओं ने कहा कि यह चमकने वाला प्रोटीन जब पराबैंगनी किरणों और

## अध्ययन

- कैंसर की पहचान के लिए होता है इस प्रोटीन का इस्तेमाल
- संक्रामक रोगों और अंगों के विकास की पहचान में भी सहायक

नीली रोशनी के संपर्क में आता है तो यह प्रोटीन बहुत कम मात्रा में मौजूद होता है और ज्यादा तापमान पर स्थिर रहता है। फ्लूरोसेंस माइक्रोस्कोपी एक ऐसी

तकनीक है जो जीवित ऊतकों का परीक्षण करने के काम आती है। इन ऊतक की पहचान सिर्फ चमकने पर ही होती है। एक खास वेबलेंथ पर लेजर के संपर्क में आने पर कुछ प्रोटीन विभिन्न तरह की रोशनी उत्पन्न करते हैं। इस रोशनी को खास माइक्रोस्कोप की मदद से पहचाना जा सकता है। शोधकर्ताओं का कहना है कि यह प्रोटीन फ्लूरोसेंस माइक्रोस्कोपी के लिए बेहतर काम कर सकता है।

## Herbal Products ((Hindustan: 20190610)

[http://epaper.livehindustan.com/imageview\\_61905\\_68095462\\_4\\_1\\_10-06-2019\\_i\\_20.pagezoomsinwindows.php](http://epaper.livehindustan.com/imageview_61905_68095462_4_1_10-06-2019_i_20.pagezoomsinwindows.php)

# हर्बल उत्पादों का सेवन संभलकर करें

**नई दिल्ली।** हर्बल उत्पादों का इस्तेमाल काफी तेजी से बढ़ रहा है चाहे वो दवा हो या फिर शरीर को स्वस्थ व सुंदर बनाए रखने वाले उत्पाद हों। अधिकतर लोग सोचते हैं कि हर्बल उत्पाद शत-प्रतिशत सुरक्षित हैं, लेकिन ऐसा बिल्कुल भी नहीं है। एक शोध में पता चला है कि इनके अधिक सेवन से दुष्प्रभाव भी हो सकते हैं। जाहिर है कि किसी भी तरह के उत्पादों को तय मानकों के हिसाब से न लिया जाए तो ये घातक बन जाते हैं।

## **Pregnancy**

### **Carry an easy load**

**What every pregnant woman needs to know for a safe and healthy birth (The Tribune: 20190610)**

<https://www.tribuneindia.com/news/health/carry-an-easy-load/784639.html>

Pregnancy can be a difficult phase in a women's life, especially for first-time moms, as the anxiety of unknown can cause stress. Here is a simple guide to some healthy practices that can make birth safer for both mothers and babies.

Physical activity

Most pregnant women with uncomplicated pregnancies should do some simple exercises every day. Moderate-intensity exercise (being able to carry on a normal conversation during exercise) for 30 minutes is recommended but only after consultation with your gynaecologist and under a trained instructor.

There are some misconceptions that bed rest is must for pregnant women as it can reduce the risk of miscarriage, pre-term birth or improves pregnancy outcome in twin or multiple pregnancies or impaired foetal growth. Moreover, bed rest has some known potential harms. It promotes loss of trabecular bone density, increases venous thromboembolism risk, produces musculoskeletal deconditioning, and in some cases cause significant psychosocial strain.

Bed rest is advised to pregnant women diagnosed with symptoms of heart disease, high blood pressure, having any risks of premature labour (incompetent cervix, multiple pregnancy, ruptured membranes), pre-eclampsia (characterised by high blood pressure, usually occurs after 20th week), etc.

## **Mental health issues**

### **Poor sleep linked to mental health issues in students (The Tribune: 20190610)**

<https://www.tribuneindia.com/news/health/poor-sleep-linked-to-mental-health-issues-in-students/785040.html>

Insufficient sleep is associated with a wide range of mental health issues such as anxiety, self-harm and suicide ideation among students and athletes, according to a study.

Published in the journal Sleep, the study analysis involved 110,496 students, out of which 8,462 were athletes.

"It was really surprising to see how strongly insufficient sleep was associated with a wide variety of mental health symptoms among college students," said lead author Thea Ramsey from the University of Arizona in the US.

With every additional night of insufficient sleep, the risk of experiencing mental health symptoms increased on average by more than 20 per cent.

The risk also increased by 21 per cent for depressed mood, 24 per cent for hopelessness, 24 per cent for anger, 25 per cent for anxiety, 25 per cent for desire to self-harm, 28 per cent for functional problems and 28 per cent for suicide ideatio

"The fact that sleep health was so strongly related to mental health is important since the majority of college students don't get the recommended amount of sleep needed for optimal health and functioning," said Michael Grander from the varsity. — IANS

## **Shyness**

### **That shyness can be a malady (The Tribune: 20190610)**

<https://www.tribuneindia.com/news/health/that-shyness-can-be-a-malady/784642.html>

Anxiety disorders are more common in children than perceived. However, several factors keep them from receiving treatment

In a social setting that puts children through sky-high expectations, it is normal for a child to feel anxious sometimes — before a key examination, before a stage appearance or a sports competition. What is not normal is having a child who displays symptoms of anxiety and phobia without any substantial reason or cause.

#### Misunderstood symptoms

It is often incomprehensible for parents to believe that children might have anxiety disorders like adults. A number of times, children complaining of symptoms such as headaches, stomachaches, bed-wetting or feeling unwell are brushed aside as being fussy or lazy or their complaints perceived as deliberate ways of avoiding school or any other task. At other times, their symptoms are perceived as normal pangs of growing up. Unfortunately, many children with anxiety disorders fail to find right medical attention for a long time, resulting in aggravation of their condition and suffering. It is important to identify and treat anxiety disorders in children as these have the potential to grow into adult anxiety disorders as well as psychopathologies such as depression, substance-use problems and suicide attempts.

#### Sufficient evidence

A growing body of research in the past two decades has found that a substantial number of children and adolescents do suffer from anxiety disorders. Many factors such as increasing parental expectations, a nuclear family set-up that limits children's family connections and inadequate social mingling may have contributed to the rise of anxiety disorders among children in recent years.

A study published in the Journal of Post Graduate Medicine found