



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY  
Friday 20190607

## Food and Nutrition

### **More than 2 eggs a day deadly for your heart: Study (The Tribune: 20190607)**

<https://www.tribuneindia.com/news/health/more-than-2-eggs-a-day-deadly-for-your-heart-study/783562.html>

Egg lovers please take note. Researchers have warned that eating more than two eggs daily can increase the risk of death and developing cardiovascular diseases.

Published in the Journal of the American Medical Association, the study tracked the diets, health and lifestyle habits of nearly 30,000 adults in the US for as long as 31 years.

It was found that the cholesterol in eggs, when consumed in large quantities, is associated with ill health effects, said Katherine Tucker, Professor at the University of Massachusetts Lowell in the US.

According to the US Department of Agriculture, one large egg contains nearly 200 milligrams of cholesterol, roughly the same amount as an eight-ounce steak.

Consuming more than 300 milligrams of cholesterol per day was associated with a 17 per cent higher risk of cardiovascular disease and an 18 per cent higher risk of death.

Eating several eggs a week is reasonable but I recommend people to avoid eating three egg omelettes every day. Nutrition is all about moderation and balance," Tucker said. —

## Migrain

### **Smartphone relaxation app may help manage migraine (The Tribune: 20190607)**

<https://www.tribuneindia.com/news/health/smartphone-relaxation-app-may-help-manage-migraine/783548.html>

Migraine sufferers who used a smartphone-based relaxation technique at least twice a week experienced fewer headache days per month, a study has found.

The RELAXaHEAD app, developed by researchers from the New York University in the US, guides patients through progressive muscle relaxation, or PMR.

In this form of behavioral therapy, patients alternately relax and tense different muscle groups to reduce stress.

The research, published in the journal *Nature Digital Medicine*, is the first to evaluate the clinical effectiveness of an app for treating migraine, and adding an app to standard therapies (such as oral medications) under the supervision of a doctor.

"Our study offers evidence that patients may pursue behavioral therapy if it is easily accessible, they can do it on their own time, and it is affordable," said Mia Minen, from NYU.

"Clinicians need to rethink their treatment approach to migraine because many of the accepted therapies, although proven to be the current, best course of treatment, aren't working for all lifestyles," Primary symptoms of migraine include moderate to severe head pain that is often accompanied by nausea and sensitivity to light and sound.

Patients are often prescribed drug treatments and behavioral therapy, but do not pursue the therapy even after a doctor's recommendation because of the expense and inconvenience, said Minen.

"Oftentimes they end up only taking medications," she said.

To see if an app might increase compliance, the research team analysed app use by 51 confirmed migraine patients, all of whom owned smartphones.

Participants were asked to use the app for 90 days and to keep a daily record of the frequency and severity of their headaches, while the app kept track of how long and often patients used PMR.

Study participants, on average, had 13 headache days per month, ranging between four and 31. Thirty-nine per cent of patients in the study also reported having anxiety, and 30 per cent had depression.

PMR therapy utilising the RELAXaHEAD app dropped to 51 per cent after six weeks, and to 29 per cent after three months.

The researchers, who anticipated a gradual decrease in the use of the app, next plan to identify potential ways to encourage more frequent sessions.

They also plan to study the best ways to introduce the app into their clinical practices.

Minen said that taken as a whole, the study results suggest that accessible smartphone technologies "can effectively teach patients lifelong skills needed to manage their migraines."

PTI

## **Heart disease risk**

### **Unsalted tomato juice cuts heart disease risk (The Tribune: 20190607)**

<https://www.tribuneindia.com/news/health/unsalted-tomato-juice-cuts-heart-disease-risk/783545.html>

Researchers have found that drinking unsalted tomato juice can lower blood pressure and cholesterol level in adults who are at risk of cardiovascular disease, according to a study.

For the study, published in the journal of Food Science and Nutrition, researchers from the Tokyo Medical and Dental University in Japan examined nearly 500 residents - 184 males and 297 females.

It was found that blood pressure in 94 participants with untreated pre-hypertension or hypertension dropped significantly.

Systolic blood pressure lowered from an average of 141.2 to 137 mmHg, and diastolic blood pressure lowered from an average of 83.3 to 80.9 mmHg.

High LDL (or bad) cholesterol levels in 125 participants decreased from an average of 155 to 149.9 mg/dL, said the study.

According to researchers, these beneficial effects were similar among men and women and also for different age groups. IANS

## **Good sleep**

### **Good sleep cuts appetite for sweet, salty food (The Tribune: 20190607)**

<https://www.tribuneindia.com/news/health/good-sleep-cuts-appetite-for-sweet-salty-food/783533.html>

Sleeping less than seven hours is associated with an increased cardio-metabolic risk.

A good night's sleep helps in reducing the desire for sweet and salty foods, intake of sugar and caloric content, says a study.

It is known that sleeping less than seven hours is associated with an increased cardio-metabolic risk—heart disease risk and metabolic disorders—but increasing the sleep duration can help reduce it, said lead author Rob Henst, Associate Professor at the University of Cape Town in South Africa.

In the study, published in the Journal of Sleep Research, researchers found that sleep extension was associated with improved measures of insulin sensitivity and reductions in overall appetite, desire for sweet and salty foods, intake of daily free sugar, and percentage of daily caloric intake from protein.

“It is now apparent that poor sleep quality may be an equally important risk factor for cardio-metabolic diseases,” said Dale Rae from the varsity.

For the study, the researchers studied a data of 138 persons who were either healthy, healthy short-sleeping, overweight short-sleeping, or pre- or hypertensive short-sleeping individuals.  
IANS

## **Drug-resistant tuberculosis**

### **Drug-resistant tuberculosis reversed in lab (The Tribune: 20190607)**

<https://www.tribuneindia.com/news/health/drug-resistant-tuberculosis-reversed-in-lab/783525.html>

Scientists have found a compound that prevents and even reverses resistance to a widely used antibiotic for treating tuberculosis—the most lethal infectious disease worldwide.

A growing rise in drug-resistant tuberculosis (TB) is a major obstacle to successfully treating the illness. About 1.5 million people died of TB in 2017, making it the most deadly infectious disease in the world.

Researchers at Washington University in the US and Umea University in Sweden reversed resistance to isoniazid, the most widely used antibiotic for treating TB.

The research, published in the journal Proceedings of the National Academy of Sciences, was conducted in bacteria growing in the lab, setting the stage for future studies in animals and people.

Using the compound in conjunction with isoniazid potentially could restore the antibiotic’s effectiveness in people with drug-resistant tuberculosis.

The compound also may bolster the antibiotic’s power to kill TB bacteria—even those sensitive to drugs—which means doctors could start thinking about cutting down the onerous six-month treatment regimen they prescribe today.

“It is very hard for people to comply with such a long regimen. It’s four drugs. They have side effects,” said Christina Stallings, an associate professor at the Washington University.

“The longer people have to be on antibiotics, the more issues with patient compliance you get, and that can lead to drug resistance and treatment failure,” said Stallings.

“Here, we’ve found a compound that sensitizes bacteria to an antibiotic, prevents drug resistance from arising, and even reverses drug resistance—at least in the lab,” she said.

“If we can turn this compound into a drug for people, it could make our current therapies more effective and be really beneficial for fighting this pandemic,” she said.

Tuberculosis is caused by the bacterium *Mycobacterium tuberculosis*. Once inside the body, the bacteria morph into a tougher form that can withstand more stress and is harder to kill.

Rather than look for new and better antibiotics, the researchers decided to look for compounds that prevent the bacteria from toughening up.

When put in a low-oxygen environment to mimic the stressful conditions TB bacteria encounter inside the body, the bacteria come together and form a thin film called a biofilm that is resilient to not only low-oxygen conditions but also to antibiotics and other stressors.

The team screened 91 compounds that share a core chemical structure that inhibits biofilms in other bacterial species.

The researchers found one compound, called C10, that did not kill the TB bacteria but prevented them from forming a biofilm.

Further experiments showed that blocking biofilm formation with C10 made the bacteria easier to kill with antibiotics and even curbed the development of antibiotic resistance.

The researchers needed only a fraction of the amount of isoniazid to kill the TB bacteria when C10 was included than with isoniazid alone.

In addition, one out of one million TB bacteria spontaneously become resistant to isoniazid when grown under typical laboratory conditions.

However, when the researchers grew TB bacteria with isoniazid and the compound, the drug-resistant mutant bacteria never arose.

“By combining C10, or something like it, with isoniazid we could enhance the potency of the antibiotic and block the TB bacteria from developing drug resistance,” Stallings said.

“That means we might be able to shorten the treatment regimen,” she said.

The compound is not ready to be used in people or even tested in animals, Stallings cautioned.

This study was conducted on bacteria growing in a lab. The researchers are still figuring out whether the compound is safe and how it might be processed by the body. PTI

## **HIV patients**

### **HIV patients at increased risk of heart disease, stroke (The Tribune: 20190607)**

<https://www.tribuneindia.com/news/health/hiv-patients-at-increased-risk-of-heart-disease-stroke/783056.html>

Patients with HIV are at a significantly higher risk of suffering from heart and blood vessel diseases as compared to those without the infection, scientists say.

According to a new scientific statement published in the journal *Circulation*, effective antiretroviral therapy has changed HIV from a progressive, fatal disease to a chronic, manageable condition that increases the risk of heart attacks and strokes.

Interactions between traditional risk factors, such as diet, lifestyle and tobacco use, and HIV-specific risk factors, such as a chronically activated immune system and inflammation characteristic of chronic HIV contribute to the increased risk of heart and blood vessel diseases in HIV patients.

Tobacco use, a major risk factor for cardiovascular diseases, is common among people living with HIV.

Heavy alcohol use, substance abuse, mood and anxiety disorders, low levels of physical activity and poor cardio-respiratory fitness are also common among people living with HIV and may contribute to elevated risk for diseases of the heart and blood vessels, according to the statement.

“Considerable gaps exist in our knowledge about HIV-associated diseases of the heart and blood vessels, in part because HIV’s transition from a fatal disease to a chronic condition is relatively recent, so long-term data on heart disease risks are limited,” said Matthew J Feinstein, from Northwestern University in the US.

In addition, people living with HIV are often stigmatised and face significant barriers to optimal health care, such as education level, where they live, healthcare literacy, cognitive impairment, internalised and anticipated stigma, gait and mobility impairment, frailty, depression and social isolation.

There are also disparities in care based on age, race, ethnicity and gender.

Another area of concern is the ageing population of people living with HIV — 75 per cent of people living with HIV are over age 45.

“Ageing with HIV differs greatly from the aging issues facing the general population,” said Jules Levin, in an accompanying patient perspective.

“On average, people living with HIV who are over 60 years old have 3-7 medical conditions, including heart attacks, strokes, heart failure, kidney disease, frailty and bone diseases and many take 12-15 medications daily,” said Levin.

“As they age, people living with HIV are often alone and disabled, emotionally homebound due to depression, and are socially isolated,” he added.

“In addition, they often suffer from lack of mobility and an impaired ability to perform normal daily functions,” he said.

Providing scientifically based recommendations on how to reduce the risk of cardiovascular disease among people living with HIV is also challenging.

“There is a dearth of large-scale clinical trial data on how to prevent and treat cardiovascular diseases in people living with HIV. This is an area of research that is needed for informed decision-making and effective CVD prevention and treatment in the ageing population of people living with HIV,” said Feinstein. — PTI

## **Water crisis**

### **Water crisis looming, govt yet to wake up (The Tribune: 20190607)**

<https://www.tribuneindia.com/news/punjab/water-crisis-looming-govt-yet-to-wake-up/784133.html>

Though the Punjab State Farmers and Farm Workers' Commission had submitted a draft of agriculture policy addressing groundwater crisis in detail to the government in July last year, it is gathering dust in government files.

The draft policy had mentioned that a region specific primary ecological constraint has emerged in the form of falling water table. "The extraction of water is becoming ecologically and economically unsustainable. Even worse, problems of severe waterlogging and soil salinisation are emerging in the south-western parts of Punjab."

The main culprit behind the falling water table is the state policy of free power for agriculture in combination with Central policy favourable to paddy cultivation, which paved the way for indiscriminate use of groundwater. The commission had also recommended "a dire need to diversify away from paddy."

Besides, to address the water crisis in the state, the policy draft had 15 important recommendations. It included stopping free power to rich farmers, preparing a state water policy, introducing water-efficient technologies for irrigation, use abiana (water charges) for maintenance of canal irrigation system, promoting restoration of storage capacity of natural and manmade water bodies, recycling of waste water for irrigation etc.

The policy was drafted in consultation with all the stakeholders, including farmer and agricultural labour organisations. However, in the past one year, the government is "sitting" on the draft.

## **Delhi's 'bad air'**

### **Delhi's 'bad air' days down by 33%, says Prakash Javadekar (The Hindu: 20190607)**

<https://www.thehindu.com/sci-tech/energy-and-environment/delhis-bad-air-days-down-by-33-says-prakash-javadekar/article27580061.ece>

Union Minister for Environment, Forest and Climate Change Prakash Javadekar and MoS Babul Supriyo hold saplings at a function to mark World Environment Day, in New Delhi on June 5, 2019.

Union Minister for Environment, Forest and Climate Change Prakash Javadekar and MoS Babul Supriyo hold saplings at a function to mark World Environment Day, in New Delhi on June 5, 2019. | Photo Credit: PTI

Prakash Javadekar also said that the number of days with 'moderate' to 'good' air quality has increased from 108 in 2016 to 159 in 2018.

Air quality in Delhi-NCR has improved and the number of days with "bad" air quality has come down by 33 per cent, Union Environment Minister Prakash Javadekar said on Thursday.

Speaking at an event to mark World Environment Day, which was on June 5, the Minister said the situation "is not as bad" as being portrayed in the media.

"Media reports are always creating a picture that lakhs of people are dying of air pollution but it is not as bad. Yes pollution is there but efforts are on," Mr. Javadekar said.

"Number of poor air quality days in Delhi in 2016 used to be 246, and in 2014 they used to be around 300, in 2017 it came down to 213 and now it has come down to 206. I am confident that when 2019 figures will come, the number of poor air quality days will further come down. This is a tremendous success. The days of poor quality air have reduced. It is a significant improvement," he said.

He also said that the number of days with 'moderate' to 'good' air quality has increased from 108 in 2016 to 159 in 2018.

"Moderate to good days have increased. 108 days of moderate air quality in 2016 have increased to 152 in 2017 and now they have gone up to 159 days. This progress in good air days are the result of concerted efforts of last four years for the capital and NCR," he said, adding that air quality monitoring systems which record the air quality index (AQI) show improvement in air quality.

An AQI between 0 and 50 is considered 'good', 51 and 100 'satisfactory', 101 and 200 'moderate', 201 and 300 'poor', 301 and 400 'very poor', and 401 and 500 'severe'

Calling for people's participation, the minister said that just wearing masks will not help and every individual has to act responsibly towards environment.

"Just wearing masks won't help. People have to actively participate and act responsible towards environment. We have to save water and electricity, take cycle for distance up to two km, use public transport, maintain vehicles. All these activities will help reduce pollution. We will do better," he said at the event on the theme of 'Beat Air Pollution'

In his address, Minister of State for Environment Babul Supriyo urged people to use car pool at least once in a week to contribute to the cause of environment and "not be afraid of the alarming figures in the war against pollution".

He also said the ministry has now become a 24-hour working ministry as his senior minister wakes up at 4 am and he sleeps at 4 am.

"With my inclusion in this ministry, it has become a 24-hour ministry because my minister (Javadekar) wakes up at 4 am and I sleep at 4 am," he said.

He said there was a lot that needs to be done for environment and referred to his daughter's WhatsApp group saying they had a lot of ideas to protect environment.

"My daughter studies in Bombay and she has a WhatsApp group to which I was added and I am amazed to see the ideas they all come up with to protect the planet," he said.

The event was attended by several senior officials of the ministry of environment, Central Pollution Control Board (CPCB) chairman S P S Parihar and officials from several state pollution control boards.

During the event, MoUs were signed between IITs across the country and respective state pollution control boards for joint efforts in combating air pollution.

The ministry also released several publications, including Orchids of India by Botanical Survey of India which identified over 700 species of orchids in the country.

Another book — Plant Discoveries — was released in which 438 plant species have been added to the Indian flora in 2018.

“I want to congratulate Botanical Survey of India and those who have identified 438 species of plants. I also congratulate the Zoological Survey of India for identifying 179 new species and I appreciate their research. National Tiger Conservation Authority has also made immense contribution in tiger conservation,” Mr. Javadekar said.



## **Nipah**

### **Nipah: six suspected patients in Kerala test negative (The Hindu: 20190607)**

<https://www.thehindu.com/news/national/kerala/nipah-six-suspected-patients-in-kerala-test-negative/article27545854.ece>

They will be moved from isolation ward only after observation: Health Minister

Samples of body fluids taken from six patients at the Government Medical College Hospital in Kochi that were sent to the National Virology Institute, Pune, have tested negative for Nipah.

Caught napping: on Nipah outbreak in Kerala

However, the patients will be moved from the isolation ward of the hospital only after observation, said Minister for Health K.K. Shylaja here on Thursday.

Meanwhile, the 23-year old confirmed Nipah patient being treated at a private hospital is stable, she added.

Body fluid samples of the seventh suspected case of Nipah admitted to the hospital late on Wednesday have been sent to the virology institutes in Alappuzha and Pune for tests.

Of the seven people in the isolation ward, three are nurses who had provided care to the confirmed Nipah patient. One is his classmate while others are from Chalakudy, Parakadavu

and Kothamamalam and are being treated in the medical college hospital. These cases apparently have had no contact with the confirmed case.

The Minister said that all those quarantined for being in direct or indirect contact with the confirmed case will continue in the isolation ward till the incubation period is over.



## **Health and Hygiene**

**Telling numbers: In 3 states, how the absence of toilets contaminates water, soil (The Indian Express: 20190607)**

<https://indianexpress.com/article/explained/telling-numbers-in-3-states-how-the-absence-of-toilets-contaminates-water-soil-5768897/>

Among the three states, the levels were the worst in Bihar where non-ODF villages showed 35.7 times higher groundwater contamination than ODF villages, as compared to 6.6 times higher in West Bengal and 5.3 times higher in Odisha.

Why Cabinet Committees are formed, what are the functions of each

Explained: Free rides, fare perspective

Telling numbers: In 3 states, how the absence of toilets contaminates water, soil

The study, carried out by UNICEF, looked at the environmental impact of the Swachh Bharat Mission in 12 ODF and 12 non-ODF villages in three states — West Bengal, Odisha and Bihar — and was based on 725 samples of water, soil, and food.

A study released by the central government has found that villages that are not yet open defecation-free (non-ODF) is 12 times more likely than ODF villages to carry the risk of faecal contamination of groundwater. The study, carried out by UNICEF, looked at the environmental impact of the Swachh Bharat Mission in 12 ODF and 12 non-ODF villages in three states —

West Bengal, Odisha and Bihar — and was based on 725 samples of water, soil, and food. The overall findings were that non-ODF villages are:

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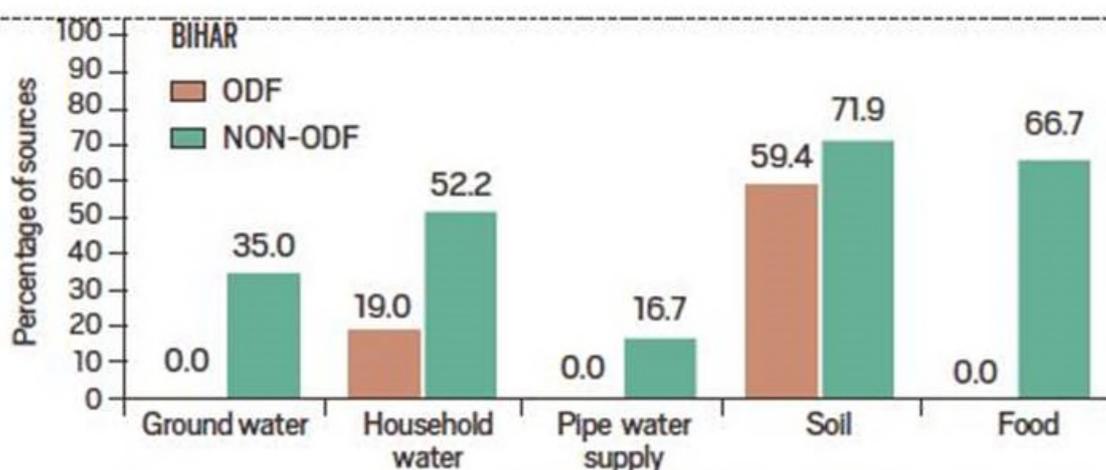
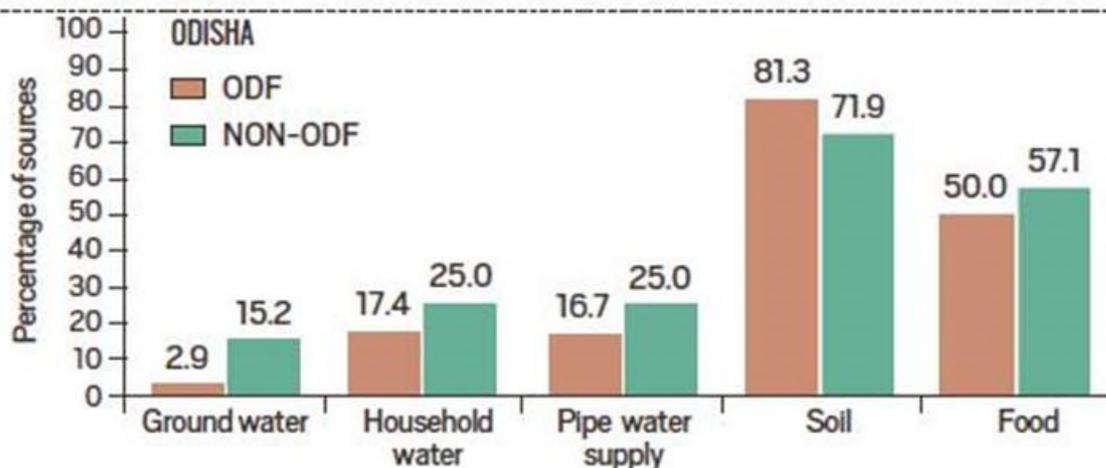
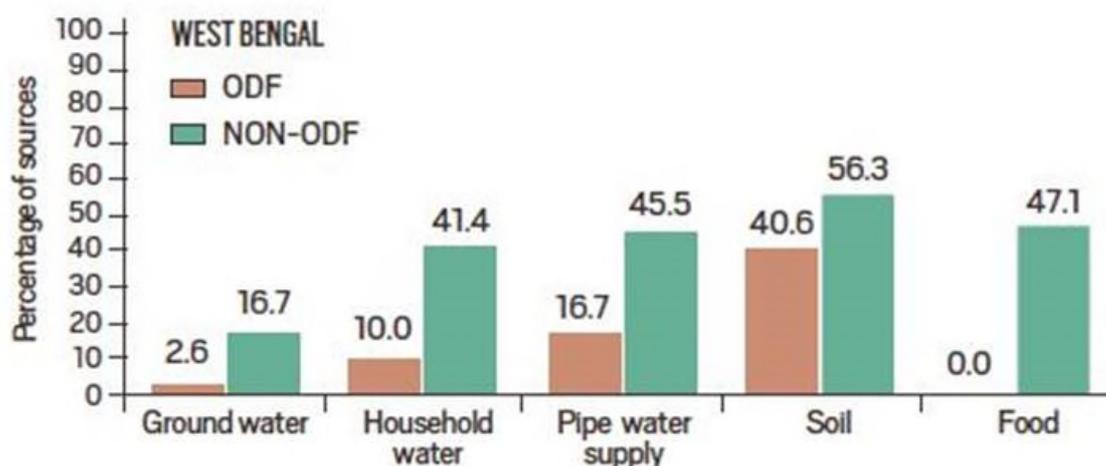
- \* 12.7 times more likely to have their groundwater sources contaminated (from contaminants traceable to humans alone)
- \* 2.40 times more likely to have their piped water contaminated
- \* 2.48 times more likely to have their household water (stored) contaminated
- \* 1.1 times more likely to have their soil contaminated
- \* 2.16 times more likely to have food contaminated and 2.48 times more likely to have household drinking water contaminated

Among the three states, the levels were the worst in Bihar where non-ODF villages showed 35.7 times higher groundwater contamination than ODF villages, as compared to 6.6 times higher in West Bengal and 5.3 times higher in Odisha. For piped water, the relative risk of contamination (non-ODF to ODF) was 1.33 times more in Bihar, 2.73 times more in West Bengal and 1.50 times more in Odisha. For household water (stored), the relative risk was 2.74 times more in Bihar, 4.14 times more in West Bengal and 1.44 times more in Odisha.

For soil, the relative risk of faecal contamination traceable to humans, in non-ODF villages as compared to ODF villages, was 1.21 times more in Bihar, 1.39 times more in West Bengal and 0.89 times more in Odisha. And for food, the relative risk was 6.67 times more in Bihar; 8.47 times more in West Bengal and 1.14 times more in Odisha.

In its interpretation of the variations observed among states, the UNICEF report stated that in Odisha, the sudden onset of rain during sampling resulted in decreased impact. It said this indicates that systems for solid and liquid waste management, including faecal sludge management and drainage need improvement to realise the full benefits of residing in ODF environments.

## CONTAMINATION OF ENVIRONMENTAL MEDIUMS WITH HuBac (FAECAL INDICATOR BACTERIA OF HUMAN ORIGIN)



Source: UNICEF report via Swachh Bharat Mission

## Weak public health

Weak public health leads to deteriorating vaccine coverage, study finds (New Kerala: 20190607)

<https://www.newkerala.com/news/read/153909/weak-public-health-leads-to-deteriorating-vaccine-coverage-study-finds.html>

A recent study by public health expert professor John Ashton highlights how the weakening of public health is leading to deteriorating the vaccine coverage levels.

The study was published in the 'Journal of the Royal Society of Medicine'

The health expert describes the recent fall in the uptake of other preventative programmes, including those for bowel, breast and cervical cancer and aortic aneurysm. The professor through his research indicates the fragmentation and weakening of the arrangements for public health, and especially the links with the NHS, since the 2013 reorganisation when directors of public health moved to local government.

With over 900 cases of measles over the last 12 months in Britain, Prof Ashton writes that the current weaknesses in the public health delivery system should be resolved before resorting to legislation.

The Secretary of State for Health, Matt Hancock, has recently suggested the possibility of fines for parents who refuse to have their children vaccinated, together with a ban on anti-vaccination posts on social media.

"Part of the problem is making the seeming invisibility of prevention, visible; this requires imagination and creativity, together with leadership and the effective delivery of services."

"That it does not have to be like this is shown by the recovery in the measles, mumps and rubella vaccination in the north-west of England, with one of the strongest public health systems and visible public health leadership, to herd immunity levels, following the initial dip after the publication of the claims of discredited former doctor Andrew Wakefield," he added.

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### Cell migration mechanisms

Cell migration mechanisms leads to breast cancer spreading to bones, study finds (New Kerala: 20190607)

<https://www.newkerala.com/news/read/153891/cell-migration-mechanisms-leads-to-breast-cancer-spreading-to-bones-study-finds.html>

A recent study examined the mechanisms of cell migration which further states how breast cancer cells generate and later settle into the bones.

The study was published in the journal, 'Scientific Reports'.

Jing Liu, one of the researchers believed that by examining the cancer cells through biophysics, it will be clear how cancer cells generate enough force to move from the primary tumour site through the body.

"From a physics point of view, all the cell migration is driven by force," Liu said.

"We really want to discover the force architecture of a cell and deliver the biomechanical and biophysical explanations toward cellular activities. The major focus of our lab is developing imaging methods to physically interpret cancer biology."

"We are working with mathematicians and engineers to develop a mathematical model and physical model of the cell migration," he added.

A Förster Resonance Energy Transfer-based tension, or FRET, the sensor was used to monitor the force dynamics during cell movement. The sensor, equipped with FRET molecules, acts like a spring to measure the tiny amount of force that is generated by the cancer cell through focal adhesion and that drives the cell to move. As the cancer cell moves, the spring expands; researchers measure the force by monitoring the change of FRET interactions.

Researchers monitored the mobility of the cancer cells and found that when a cancer cell gets very close to a bone cell, it exhibits low tensions and slow mobility. The researchers hope this finding might lead to clues for how to control -- and eventually, stop -- cell migration. "This gives us a more precise measurement of how fast the cell is moving and where the cell will go to," Liu said.

He further went on to say, "The basic idea is to use imaging as a method to see some of the physical parameters in cancer biology. Instead of only being able to look at millions of cells at time, technology has enabled us to examine a single cell. When the system is going smaller and smaller, the physical parameters inside the biological system become more and more useful and more and more important." \

Depression, anxiety

Weak upper body strength in women associated with depression, anxiety finds (New Kerala: 20190607)

<https://www.newkerala.com/news/read/153880/weak-upper-body-strength-in-women-associated-with-depression-anxiety.html>

Weak upper and lower body fitness can cause serious depression and anxiety in midlife women, a recent study suggests.

Although several studies have previously linked depression in midlife women with self-reported low physical activity, this new study evaluates objective measures of physical performance in relation to depression and anxiety in premenopausal, perimenopausal, and postmenopausal women.

Depression and anxiety are prevalent symptoms experienced by midlife women. This latest study of more than 1,100 women aged 45 to 69 years found, in fact, that 15 per cent of participants, especially those of younger age, reported depression and or anxiety.

Findings were published in the Journal of the North American Menopause Society. Because depression can cause disability, reduced quality of life, mortality, and heart disease, researchers felt it was important to identify potentially modifiable risk factors that could reduce morbidity and mortality.

The study observed significant associations of objective physical performance measures with depression and anxiety.

Specifically, they found that weak upper body strength (handgrip strength) and poor lower body strength (longer duration to complete the repeated chair stand test) were associated with elevated depression and/or anxiety symptoms.

According to the researchers, future trials will be needed to determine whether strengthening exercises that improve physical performance might similarly help reduce depression and anxiety in midlife women.

## Nipah infection

How Nipah infection is different from swine flu, bird flu (New Kerala: 20190607)

<https://www.newkerala.com/news/read/153869/how-nipah-infection-is-different-from-swine-flu-bird-flu.html>

With the return of the Nipah infection in Kerala, the need for awareness about zoonotic diseases has increased, especially in view of the spread of misinformation about these diseases.

Doctors say that the symptoms of Nipah infection, swine flu and bird flu are similar, but there are also differences in how the diseases impact people and also in their treatment.

'The basic difference between the Nipah virus and swine flu is that for swine flu drugs and vaccines are available whereas for Nipah there is no treatment or anti viral medication,' Manoj Sharma, Senior Consultant, Internal Medicine, Fortis Escorts Heart Institute in New Delhi told IANS.

According to the Ministry of Health and Family Welfare, the human Nipah virus (NiV) infection is a zoonotic disease which was first recognised in a large outbreak of 276 reported cases in Malaysia and Singapore from September 1998 to May 1999.

In India, during 2001 and 2007 two outbreaks in humans were reported from West Bengal. But in 2018 and 2019, it has affected mainly Kerala.

'The symptoms of Nipah infection are like flu symptoms -- cough, fever, headache, bodyache, cold and then breathlessness later on,' said M S Chaudhary, Senior Consultant, Internal medicine, Indraprastha Apollo Hospitals, New Delhi.

'Usually it is the bats which spread Nipah virus. Either one eats bat-infected food, or has close contact with an infected person. So the paramedical staff, very close relatives and all are at risk of contracting the virus,' Chaudhary added.

While Nipah is classified as a 'zoonotic' disease - those that spread from animals to humans -- once a human is infected then it is contagious for other people, said Sharma, adding that Nipah virus can also infect pigs.

The Nipah virus affects the respiratory and nervous system and patients may experience respiratory failure or neurological failure. But swine flu usually does not lead to neurological problems, Chaudhary said.

Swine flu was pandemic in 2009 worldwide. Since then there have been sporadic occurrences. So swine flu can spread to any region.

'It can spread from human to human. It is also seen in pigs. It is a variant of pig influenza virus,' Sharma said.

'Symptoms of bird flu are also similar. Bird flu also spreads by infected birds which infect the food and the infection is passed onto humans. There are not too many regions affected by bird flu virus,' Chaudhary said.

'The basic thing is to avoid catching the infection. Hand washing and drying of hands is the key to ensure that the infection does not spread,' Sharma added.

In the current Nipah outbreak, a Kerala youth has tested positive for the virus, while three nurses who treated him, a friend and another person have been kept in isolation.

A total of 311 people from Thrissur, Paravur in Ernakulam district, and Thodupuzha in Idukki are also under observation, according to Kerala Health Minister K.K. Shailaja.

### Anti-anxiety medication

Researchers examine potential misuse of anti-anxiety medication: Study (New Kerala: 20190607)

<https://www.newkerala.com/news/read/153863/researchers-examine-potential-misuse-of-anti-anxiety-medication-study.html>

As part of a recent study, researchers examined the potential misuse of anti-anxiety medication.

There is concern about the misuse of the sedative anti-anxiety medication alprazolam because of the "high" it can create.

According to the findings, published in the Journal of British Journal of Clinical Pharmacology, non-medical use of alprazolam (anti-anxiety medication) in the United Kingdom is a significant issue, and it appears to be more prevalent in younger adults.

The study examined results from a survey that included 10,019 adults in the United Kingdom. The estimated national prevalence of lifetime non-medical use of alprazolam was 0.32%, and 1.30% for diazepam (valium), another anti-anxiety medication.

The prevalence of non-medical use in the last 90 days was significantly different when split by age category for alprazolam, but not for diazepam, with alprazolam non-medical use being more common among younger adults.

The authors noted that most individuals taking alprazolam for non-medical reasons are doing so without a prescription and therefore are unlikely to obtain medical advice before use.

## Dietary supplements

Dietary supplements pose high health risks in young adults and children (New Kerala: 20190607)

<https://www.newkerala.com/news/read/153857/dietary-supplements-pose-high-health-risks-in-young-adults-and-children.html>

Be it weight loss, muscle building or a boost in energy, people today are heavily relying on dietary supplements. A new study suggests that the consumption of these supplements as compared to that of vitamins is linked to the increased health risks in children and young adults.

The study published in the Journal of Adolescent Health also highlighted that dietary supplements increase the three times.

"The FDA has issued countless warnings about supplements sold for weight loss, muscle building or sports performance, sexual function, and energy, and we know these products are widely marketed to and used by young people," said lead author Flora Or.

The researchers analyzed the relative risk for severe medical events such as death, disability, and hospitalization in individuals aged 0 and 25 years that were linked with the use of dietary supplements sold for weight loss, muscle building, or energy compared to vitamins.

Researchers found that there were 977 single-supplement-related adverse event reports for the target age group. Of those, approximately 40% involved severe medical outcomes, including death and hospitalization.

Supplements sold for weight loss, muscle building, and energy were associated with almost three times the risk for severe medical outcomes compared to vitamins.

Supplements sold for sexual function and colon cleanse were associated with approximately two times the risk for severe medical outcomes compared to vitamins.

"How can we continue to let the manufacturers of these products and the retailers who profit from them play Russian roulette with America's youth?" senior author S. Bryn Austin said.

Austin added, "It is well past time for policymakers and retailers to take meaningful action to protect children and consumers of all ages."