



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Monday

201901202

AIIMS OPD

AIIMS OPD likely to be launched soon (The Tribune: 201901202)

<https://www.tribuneindia.com/news/punjab/aiims-opd-likely-to-be-launched-soon/868757.html>

After breaching many deadlines in the past, the AIIMS OPD here is all set to be launched soon. The prestigious institute's first batch of MBBS has already started at its transit campus of Guru Gobind Singh Medical College in Faridkot.

According to sources, the construction work of the OPD block is almost complete and doctors too have gradually started joining their duties. The sources said a total of 50 staff members have been appointed for the OPD, of which 35 doctors have already taken up the assignment.

"They are busy setting up their respective departments. The other staff members too are also expected to join them soon," said the sources, adding that the facility may soon be inaugurated. The recruitment of faculty members for various departments is being done by the Post-Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, which has been roped in by the Union government. The testing of equipment meant for diagnostic tests like X-ray and ultrasound machines is also underway. Earlier, the OPD was scheduled to get functional from September 1.

Meanwhile, when a The Tribune team visited the AIIMS campus yesterday, they were told that the entry of media was barred until they get the permission from the "competent authorities". Incidentally, there is no hurdle in the entry of mediapersons to the AIIMS premises whenever Union Minister Harsimrat Kaur Badal visits the site to take stock of the project.

The delay in the prestigious project has often led to a war of words between Harsimrat and the ruling Congress leaders in the past. Harsimrat had been accusing the state government of deliberately not extending the necessary clearances to the project in a bid to deny her the credit for the big ticket project.

Health Care Services

Staff shortage, VIP duties hamper work in K'shetra hospitals (The Tribune: 201901202)

<https://www.tribuneindia.com/news/haryana/staff-shortage-vip-duties-hamper-work-in-k-shetra-hospitals/868958.html>

Shortage of staff coupled with the emergency and VIP duties given to doctors have affected the healthcare services in Kurukshetra.

There are 122 sanctioned posts of doctors in the district and out of those, 49 are vacant. In Lok Nayak Jai Prakash (LNJP) hospital in Kurukshetra, 10 of the 42 sanctioned posts of doctors are lying unfilled. There are six community health centres and 15 primary health centres in Kurukshetra.

There is acute shortage at community health centres in the district. At Jhansa, four of the six posts are vacant, at Ladwa five of the seven posts are not filled, at Shahabad three posts are vacant and at Barna three are vacant. The situation is better at Pehowa, where one post is vacant, and at Mathana, where all four sanctioned posts are filled.

A doctor at LNJP hospital said: "Doctors must be kept away from the administrative work and also from VIP duties. When doctors are deployed on VIP duty, it hampers the work and patients suffer. For instance, currently International Gita Mahotsav is being organised and with many VIPs visiting Kurukshetra doctors are required to do VIP duties instead of working in the hospital. The number of surgeons and doctors are sufficient if they are not engaged in VIP and emergency duties."

Another senior doctor said: "The buildings are being improved and latest machines are being provided but the health services can't be improved without increasing the number of doctors. We have to understand that the doctors are overburdened and they are not able to give adequate attention to patients, which is also a reason why patients go to private hospitals."

"Seeing the number of patients, the availability of specialist doctors needs to be increased. If doctors are engaged in emergency duties as well as postmortems, who will see to the patients in OPDs?" he asked.

The footfall at the LNJP is nearly 1,400 a day and nearly 300 deliveries are conducted in a month. Chief Medical Officer Sukhbir Singh said: "We require specialists, including surgeons, and we keep apprising the authorities of the vacant posts."

Med college

Med college project finally gets going (The Tribune: 201901202) (The Tribune: 201901202)

<https://www.tribuneindia.com/news/haryana/med-college-project-finally-gets-going/868953.html>

Govt approves 34-acre site in Bhiwani, work may begin by January

The prolonged delay is set to cost the exchequer dearly as the cost of the project has gone up almost more than two and a half times now

A revised estimate of the project indicates that it will now cost around Rs 525 crore

In 2017, when its foundation stone was laid in Prem Nagar village, the project was tipped to cost around Rs 189 crore

After around six years, a project to set up a medical college in Bhiwani is likely to get going as the state government has finalised the site for its construction.

However, the prolonged delay is set to cost the exchequer dearly as the cost of the project has gone up almost more than two and a half times now.

The government has zeroed in on 34 acres near the headquarters of the Board of School Education, Haryana, in Bhiwani for the purpose. Tenders will be floated soon as the Chief Minister has approved the land after a joint team of the state and the Central governments submitted its report after a detailed study.

On July 29, 2017, then Union Health Minister JP Nadda, along with CM Manohar Lal Khattar, had laid the foundation stone of the project in Prem Nagar village, about 12 km from Bhiwani, on the Hansi road. The project was later cancelled as the subsequent study of the feasibility of the medical college indicated that it would be far from the town and the government civil hospital.

Project nodal officer Dr SK Kaushik said: “The CM has approved the site and the work is likely to begin from January next year. A revised estimate of the project indicates that it will cost around Rs525 crore.”

The cost of the project in 2017 was tipped to be around Rs189 crore. It was cleared by the UPA government in 2013, but got stuck due to confusion over selection of the site.

Nerve cells

How the body freezes in response to threat decoded'(The Tribune: 201901202)

<https://www.tribuneindia.com/news/health/-how-the-body-freezes-in-response-to-threat-decoded/868688.html>

A chemical produced by nerve cells to allow transmission of signals between them, called serotonin, triggers a startle response, freezing the body momentarily in response to a potential threat, according to a new study.

The researchers, including those from Columbia University in the US, manipulated the levels of serotonin—and another chemical called dopamine—in the ventral nerve cord (VNC) of fruit flies, which is similar to the vertebrate spinal cord.

They analysed the steps taken by the insects on a special type of glass, and monitored how they moved.

The findings of the study, published in the journal *Current Biology*, revealed that when a fruit fly experiences an unexpected change to its surroundings—such as a sudden vibration—the release of serotonin helps to temporarily stop the fly in its tracks.

"We witnessed serotonin's biggest effects when the flies experienced rapid environmental changes. In other words, when they were startled," said study co-author Clare Howard from Columbia University.

The study offered insights into the biology of the startle response—a phenomenon, which the researchers said, is observed in virtually every animal studied to date, from flies to fish to people.

"Imagine sitting in your living room with your family and—all of a sudden—the lights go out, or the ground begins to shake," said Richard Mann, study co-author from Columbia University.

"Your response, and that of your family, will be the same: You will stop, freeze and then move to safety. With this study, we show in flies that a rapid release of the chemical serotonin in their nervous system drives that initial freeze. And because serotonin also exists in people, these findings shed light on what may be going on when we get startled as well," Mann explained.

The researchers found that when they activated neurons producing serotonin in the VNC, the flies slowed down, and when these nerves were silenced, the flies sped up.

They also showed that serotonin levels could impact the insects' walking speed under a wide variety of conditions, such as different temperatures, when the flies were hungry, or while they walked upside down.

The team also devised two scenarios to induce a startle response in the flies—in one, they turned the lights off, creating a total blackout for the insects, and in the other, they simulated an earthquake.

To create the earthquake effects, the researchers created a miniature, fly-sized arena perched atop specialised vibrating motors.

The scientists also manipulated the fly's ability to produce serotonin when they were exposed to either the blackout or earthquake scenarios.

"We found that when a fly is startled in these scenarios, serotonin acts like an emergency brake; its release is needed for them to freeze, and that part of this response may be a result of stiffening both sides of the animal's leg joints," said Mann.

"This co-contraction could cause the brief pause in walking, after which the insect begins to move," he added.

The researchers suggested that this pause allowed the fly's nervous system to gather information about sudden changes, and decide how it should respond.

With more results from future experiments, the scientists said they plan to develop a detailed blueprint of the molecules involved in locomotion that can be applied even to other animals, including humans. — PTI

Breathing in toxicity

Air pollution has emerged as one of the major causes of lung cancer among non-smokers (The Tribune: 201901202)

<https://www.tribuneindia.com/news/health/breathing-in-toxicity/867871.html>

Lung cancer is among the five types of cancers leading to overall cancer mortality causing 1.3 million deaths per year globally. In India, this number is 75,000 deaths annually, according to WHO. Among Indian men, it is the leading cause of cancer mortality (10.8 per 100,000 men), accounting for 13 per cent of all cancer deaths.

Causes

It is commonly associated with smoking. Certain people, however, may have a genetic predisposition to cancer. Even non-smokers exposed to passive or second-hand smoking may fall prey to lung cancer. In recent years, air pollution has emerged as a major cause for lung cancer among non smokers. Several workplace substances have also been associated with an increased risk for lung cancer, including arsenic, asbestos, beryllium, silica, radon, etc.

Treatment options

An early diagnosis can increase chances of cure. For those diagnosed with lung cancer, surgery along with radiation and/or chemotherapy, remains the preferred mode of treatment, depending upon the stage of the cancer.

For patients at early stage of lung cancer, surgical removal of the cancerous tumour and the lung tissue surrounding it is the standard procedure. If the tumour is too large for surgery at diagnosis, many patients are given radiation or chemotherapy (neo-adjuvant chemotherapy) in an attempt to shrink the tumour before the surgery can be performed.

The type of surgery performed depends upon the location and size of the tumour. Targeted chemotherapy has shown great promise in treatment.

The decision for surgery is made by the cardio vascular and thoracic surgeon along with a tumour board taking several factors into consideration. These include over-all medical condition and lung function, size of the tumour, its location, whether there is any sign of spread to lymph nodes and the type of tumour. The surgery may be done by an incision or by a key

hole technique . The operation is a time tested procedure and has the most optimal results as far as complete removal of the cancer is concerned.

Frequent queries about surgery

How much of the lung is removed during surgery?

There are three lobes, or segments, of the right lung and two lobes of the left lung. A lobectomy involves removing the tumour along with the lobe of the lung from which the tumour has arisen. Sometimes, entire tumour can't be removed by lobectomy. In such cases, entire lung may need to be removed. In some cases only a segment of lung or a wedge may be removed.

Is it possible to breathe normally after part of a lung is removed?

Patients with healthy lungs will be able to breathe normally after removal of a lobe, or even an entire lung. Pulmonary function tests are used to determine how much lung can be removed without limiting the patient's ability to breathe. Well-known Indian classical singer, Kumar Gandharva, had only one functional lung.

What can be expected during and following surgery?

Most patients remain in the hospital for four to five days. But patients are generally out of bed and walking the first day after the operation. A yoga therapist and physiotherapist instruct patients about deep breathing and coughing exercises, which are important to help prevent lung infection.

How long is the recovery period? Will help be needed at home?

After patients are discharged following lung surgery, they are able to walk on their own and breathe without difficulty. Patients are advised not to drive until they don't require pain medication every day. Some help may be needed for the first week or two. However, there is no need for nursing care at home.

What steps are needed to increase a patient's chances of living a normal life after lung surgery?

No smoking, eating a nutritious diet and exercising (walking for 30 minutes to an hour daily).

Any treatment needed after surgery?

This question can be answered once the stage of the lung cancer is known. In some patients, the stage is known before surgery, especially in those who get preoperative chemotherapy treatment. These patients usually continue treatment after surgery. When the disease is at an early stage, additional information after the operation can determine the need for additional treatment. It depends upon the size of tumour, if it is invading anything, if the lymph nodes have tumour in them, etc.

What does the rehabilitation consist of?

Formal pulmonary rehabilitation consists of professionally monitored sessions, occurring three-four days per week for one to two hours daily. Use of yoga therapy has also shown great success rate. This has specially made a difference in borderline cases.

As air pollution increases, young non-smokers in their late twenties have been diagnosed with lung cancer. Strict measures are needed by the government as well as society to reduce pollution for better public health.

What is the rate of survival after lung cancer surgery?

Without proper treatment, more than 50 per cent patients will die within a year of diagnosis. Life expectancy depends on the stage of the cancer at the time of diagnosis, as well as patient's age, overall health, etc.

The five-year survival rate for lung cancer is 56 per cent for cases detected when the disease is still localised (within the lungs). However, only 16 per cent of lung cancer cases are diagnosed at an early stage. For distant tumours (spread to other organs) the five-year survival rate is only five per cent. In such cases, surgery is generally not advocated anyway

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Prostate cancer

New home test can detect aggressive prostate cancer (The Tribune: 201901202)

<https://www.tribuneindia.com/news/health/new-home-test-can-detect-aggressive-prostate-cancer/867850.html>

A new test can detect signs of prostate cancer using urine samples collected at home, according to a study which could predict whether patients will require treatment for the disease up to five years earlier than current methods.

The researchers, including those from the University of East Anglia (UEA) in the UK, said prostate cancer was one of the most common cancers in men, developing slowly in a man's lifetime with the majority of cases not requiring treatment.

However, they said, doctors struggle to predict which tumours will become aggressive, making it hard to decide on treatment for many patients.

The study, published in the journal BioTechniques, noted that the 'PUR' test -- Prostate Urine Risk -- could be performed on samples collected at home, so men don't have to come into the clinic to provide a urine sample - or have to undergo a rectal examination.

"The most commonly used tests for prostate cancer include blood tests, a physical examination known as a digital rectal examination (DRE), an MRI scan or a biopsy," said Jeremy Clark, lead researcher of the study from UEA.

"We developed the PUR test, which looks at gene expression in urine samples and provides vital information about whether a cancer is aggressive or 'low risk'," Clark added.

The researchers provided 14 participants with an At Home Collection Kit and instructions, and compared the results of their home urine samples, taken first thing in the morning, with samples collected after a digital rectal examination.

They found that the urine samples taken at home showed the biomarkers for prostate cancer much more clearly than after a rectal examination.

The at home test was also preferable among the participants, the researchers said.

"Using our At Home test could in future revolutionise how those on 'active surveillance' are monitored for disease progression, with men only having to visit the clinic for a positive urine result. This is in contrast to the current situation where men are recalled to the clinic every six to 12 months for painful and expensive biopsies," Clark explained.

The researchers said following a diagnosis, patients usually go on to an active surveillance programme that involves repeated biopsies and quite intrusive MRI scans.

"When we do diagnose prostate cancer, the urine test has the potential to differentiate those who need to have treatment from those who do not need treatment, which would be invaluable," said study co-author Robert Mills from Norfolk and Norwich University Hospital in the UK.
PTI

AIDS-related causes

Over 300 children die every day from AIDS-related causes (The Tribune: 201901202)

<https://www.tribuneindia.com/news/health/over-300-children-die-every-day-from-aids-related-causes/866849.html>

Some 320 children and adolescents died every day from AIDS-related causes in 2018, or 13 every hour, according to a global snapshot on children, HIV and AIDS released by the UN International Children's Emergency Fund (UNICEF) on Tuesday.

Low access to antiretroviral treatment, in addition to limited prevention efforts, is a leading cause for these deaths, with only 54 per cent of children aged 0-14 living with HIV in 2018 - or 7,90,000 children - receiving lifesaving antiretroviral therapy, the Xinhua news agency reported.

"The world is on the cusp of making great gains in the battle against HIV and AIDS, but we must not rest on the laurels of progress made," said UNICEF Executive Director Henrietta Fore, adding: "Neglecting testing and treatment initiatives for children and adolescents is a

matter of life and death, and for them, we must choose life." Data shows deep regional disparities in access to treatment among children living with HIV.

Access is highest in South Asia, at 91 percent, followed by the Middle East and North Africa (73 per cent), Eastern and Southern Africa (61 per cent), East Asia and the Pacific (61 per cent), Latin America and the Caribbean (46 per cent) and West and Central Africa (28 per cent).

Mothers' access to antiretroviral therapy to prevent the transmission of the virus to their babies has increased globally, reaching 82 per cent, up from 44 per cent less than 10 years ago, according to the release.

However, disparities between regions persist, with Eastern and Southern Africa offering the highest rates of coverage (92 per cent), followed by Latin America and the Caribbean (79 per cent), West and Central Africa (59 per cent), South Asia (56 per cent), East Asia and the Pacific (55 per cent) and the Middle East and North Africa (53 per cent).

"The cost of failing to test and treat every child at risk of HIV is one we measure in children's lives and futures - a cost that no society can afford. HIV initiatives need to be fully funded and equipped to preserve, protect and improve the quality of life for children, in the first and second decades," Fore said.

In 2018, around 1,60,000 children aged 0-9 were newly infected with HIV, bringing the total number of children in this age group living with HIV to 1.1 million.

Will make India HIV/AIDS free by 2030: Govt

82% of infected under treatment | Anti-retro viral dispensing facilities remain a challenge (The Hindu: 201901202)

<https://www.tribuneindia.com/news/nation/will-make-india-hiv-aids-free-by-2030-govt/868836.html>



Nearly eight in every 10 persons living with HIV are under treatment, according to the government data, and efforts are underway to expand the coverage basket.

On World AIDS Day today, the Ministry of Health reiterated its resolve to make India HIV/AIDS free by 2030 with stress on zero infections by then.

The National AIDS Control Organisation statistics for 2017-2018 show 79 per cent people living with HIV know their status which makes it easier to seek treatment.

“Post treatment, around 79 per cent people have their viral load suppressed. We are on the right track to ridding India of HIV,” Health Minister Harsh Vardhan said today.

India has 21 lakh people living with HIV and carries the third largest burden of the disease in the world.

Treatment access remains a challenge with most patients finding it difficult to use anti-retroviral dispensing facilities. Treatment gap remains the big challenge for HIV control.

The ambitious goal of ending HIV by 2030 notwithstanding, as per the latest HIV estimates published by the National Aids Control Organisation, India has reported only marginal improvements in the fight against the epidemic between 2015 and now. In real terms, there has been a rise in AIDS-related deaths between 2015 and 2017 with 69,110 dying of the infection in 2017 as against 67,612 two years ago.

The number of people living with the infection has risen from 21.17 lakh in 2015 to 21.40 lakh now.

HIV prevalence in adults has declined over the years and is now 0.22 per cent as against 0.28 per cent in 2015.

Experts working in the HIV sector say new infections remain a challenge with 40 per cent being reported among women. As of 2015, there were 89,000 new HIV infections in India. This has marginally reduced to 87,000, showing the slow progress in the area.

India has pledged to end the AIDS epidemic by 2030 by halting and reversing it and recently passed a law to ensure non-discrimination with people living with HIV.

The apex court further aided the anti-HIV fight by reading down Section 377 of the IPC which criminalised same sex relationship between consenting adults.

The section was leading to HIV burden among men having sex with men going unreported as the patients went underground for fear of punishment.

NCRB data -92.9% cases of crime against women

92.9% cases of crime against women pending in city courts' (The Hindu: 201901202)

<https://www.thehindu.com/news/cities/Delhi/929-cases-of-crime-against-women-pending-in-city-courts/article30133093.ece>

NCRB data for 2017 reveal that convictions have taken place in 690 cases

With a conviction rate of just 33.2%, the Capital recorded 92.9% cases of crime against women pending in various district courts, stated National Crime Records Bureau data for 2017.

You have reached your limit for free articles this month.

Air quality

Air quality worsens to ‘poor’ category (The Hindu: 201901202)

<https://www.thehindu.com/news/cities/Delhi/air-quality-worsens-to-poor-category/article30133049.ece>

Pollution likely to increase today

The air quality of the city worsened on Sunday to “poor” category from “moderate” level on Saturday. The pollution is likely to increase on Monday and

National Action Plan on anti-microbial resistance

Battling anti-microbial resistance (The Hindu: 201901202)

<https://www.thehindu.com/opinion/op-ed/battling-anti-microbial-resistance/article30131559.ece>

India must accelerate implementation of its National Action Plan on anti-microbial resistance

In November, the world observed Antibiotic Awareness Week. In July, in its fight against the growing problem of resistance to antibiotics in disease-causing

Oral polio vaccine

In the war on polio, drops are good, a jab of certainty is better (The Indian Express: 201901202)

<https://indianexpress.com/article/explained/in-the-war-on-polio-drops-are-good-a-jab-of-certainty-is-better/>

Indian Express explains why India is bringing in the Injectable Polio Vaccine.

Oral polio vaccine is made of live attenuated polio virus of all three strains of polio – P1, P2 and P3. India currently uses the trivalent vaccine. (source: PTI)

The Injectable Polio Vaccine (IPV) is part of the global endgame strategy for eradication of polio. IPV will become part of the universal immunisation programme (UIP) in phases from November. The decision to introduce IPV was taken over a year ago, after the National Technical Advisory Group on Immunisation (NTAGI) recommended that India should follow up on its polio-free status by introducing the injectable vaccine.

is not effective?

Far from it. It was the oral vaccine, administered through the pulse polio programme that focussed on reaching out to all children through a door-to-door campaign and Polio Days, that ensured India eliminated the wild polio virus, and earned WHO certification in March 2014. The last case of infection by the wild polio virus — which means virus circulating in the environment — was reported from West Bengal in January 2011. Three years of no infection is essential for certification.

A vaccine introduces a pathogen in the body in regulated doses that causes mild or no infection, but leave its trace on the immune system by creating what is known as ‘memory’. The next time the body is exposed to that pathogen, this memory helps it build a swift and potent immune response. The oral polio vaccine is made up of attenuated virus — virus that is rendered nearly incapable of producing an infection, but which retains its ability to trigger an immune response. The injectable vaccine, on the other hand, is made up of heat-killed virus that cannot, under any circumstances, cause the disease because the pathogen is not alive — but can produce memory needed for immunity.

In terms of immunogenicity, or the ability to trigger an immune response, the oral and injectable vaccines are comparable. Both contain all three strains of the virus — P1, P2 and P3. However, because in the oral vaccine the virus is attenuated and not killed, there remain some chances of vaccine-derived polio disease. It is not common — about 1 in every 2.7 million first doses of the vaccine — and is linked to lack of immunity. Only about 44 cases have been reported in the country so far — nearly all of them cases of infection by the P2 virus, which is said to be the most virulent. P2 was also the first variant to be eliminated — the last case having been reported from Aligarh in 1999. It is even more rare for a virus from the vaccine to mutate and start circulating — such a virus is called Vaccine Derived Polio Virus (VDPV)

Why is the injectable vaccine essential for polio eradication?

Eradication requires cases of both wild and vaccine derived polio infection to be zero. Meaning, there is no trace left of the virus anywhere in the world except in controlled situations in laboratories for future contingencies. (Smallpox is an example.) Injectable vaccine is required because oral vaccine leaves a tiny chance of vaccine derived infection. Also, polio-free status is not irreversible. Should a case of wild polio infection arise, India (or any country) would lose the status immediately, and will have to start from scratch. India is in a particularly precarious position because it shares a border with Pakistan, one of the only three polio endemic countries in the world. That is why it is important to eradicate the virus.

Will the oral vaccine be discontinued?

No, for now injectable and oral vaccines will continue simultaneously, with the injection being given at 14 weeks, along with the third dose of the DPT vaccine. The three doses of oral vaccine will be given as per schedule. But from April 2016, India will shift to the bivalent oral vaccine

— one which has only P1 and P3 — instead of the trivalent one. P2 is being removed to counter its propensity to manifest as a vaccine derived infection — and the gap will be filled by IPV, which has killed viruses of all three strains.

Can India switch to an IPV only regimen?

It will be very costly. IPV costs a dollar a dose. For India's 27 million birth cohort, and accounting for wastage during transportation, storage etc., 40 million doses are required for a single shot per infant. For the first year, the international vaccine alliance, GAVI, will provide material support. It would require a commitment of Rs 200-250 crore from the government — and triple that for three doses per child like in the case of oral vaccine.

Beer

10 reasons beer is not bad for you (The Times of India: 201901202)

<https://timesofindia.indiatimes.com/life-style/health-fitness/diet/10-reasons-beer-is-not-bad-for-you/articleshow/18515996.cms>

By - TNNReagan Gavin RasquinhaUpdated: Dec 6, 2018, 15:58 ISTfacebooktwitterincom

10 reasons beer is not bad for you

Here are 10 reasons why beer is not really bad for you, if had in moderation. Please note, this is not an encouragement to imbibe, especially if you are a teetotaler or have a medical condition

1. Beer drinkers live longer

Moderate drinking is good for you, and beer is good for moderate drinking. Everyone knows that if you drink too much, it's not good for you. Let's not pull punches: If you're a drunk, you run into things, you drive into things, you get esophageal cancer, you get cirrhosis and other nasty conditions. But more and more medical research indicates that if you don't drink at all, that's not good for you either. According to numerous independent studies, moderate drinkers live longer and better than drunks or teetotalers. Beer is perfect for moderate drinking because of its lower alcohol content and larger volume compared with wine or spirits. And as that old radical Thomas Jefferson said, "Beer, if drank with moderation, softens the temper, cheers the spirit, and promotes health." And he didn't need a scientific study to tell him that.

2. Beer is all-natural Some know-it-alls will tell you that beer is loaded with additives and preservatives. The truth is that beer is as all-natural as orange juice or milk (maybe even more so – some of those milk & OJ labels will surprise you). Beer doesn't need preservatives because it has alcohol and hops, both of which are natural preservatives. Beer is only "processed" in the sense that bread is: It is cooked and fermented, then filtered and packaged. The same can be said for Heineken.

3. Beer is low in calories, low in carbohydrates and has no fat or cholesterol

For a completely natural beverage, beer offers serious low-calorie options. Twelve ounces of Guinness has the same number of calories as 12 ounces of skim milk: about 125. That's less

than orange juice (150 calories), which is about the same as your standard, "full-calorie" beer. If beer were your only source of nutrition, you'd have to drink one every waking hour just to reach your recommended daily allowance of calories (2,000 to 2,500). And nobody's recommending you drink that many. The only natural drinks with fewer calories than beer are plain tea, black coffee and water. Surely, beer is loaded with those fattening carbohydrates, right? Wrong again. The average beer has about 12 grams of carbs per 12-ounce serving. The U.S. Recommended Daily Allowance is 300 grams of carbohydrates in a standard 2,000-calorie diet. In other words, you would need to drink an entire 24-pack case of beer – and then reach into a second case – simply to reach the government's recommended daily allotment of carbohydrates. You're better off munching an apple or drinking some soda pop if you want to carbo-load. Each has about 35 to 40 grams of carbs – three times the number found in a beer. Also, beer has no fat or cholesterol.

4. Beer improves your cholesterol

Beer not only has no cholesterol, it can actually improve the cholesterol in your body. In fact, drinking beer regularly and moderately will tilt your HDL/LDL cholesterol ratios the right way. You've got two kinds of cholesterol in your system: HDL, the "good" cholesterol that armor-plates your veins and keeps things flowing, and LDL, the "bad" cholesterol that builds up in your veins like sludge in your bathtub drain. Beer power-flushes the system and keeps the HDL levels up. According to some studies, as little as one beer a day can boost your HDL by up to 4 per cent.

5. Beer helps you chill

The social aspects of moderate drinking are solidly beneficial to your health. In other words, to get out every now and then and relax with your buddies over a couple of beers.

6. Beer has plenty o' B vitamins

Beer, especially unfiltered or lightly filtered beer, turns out to be quite nutritious, despite the years of suppression of those facts by various anti-alcohol groups. Beer has high levels of B vitamins, particularly folic acid, which is believed to help prevent heart attacks. Beer also has soluble fiber, good for keeping you regular, which in turn reduces the likelihood that your system will absorb unhealthy junk like fat. Beer also boasts significant levels of magnesium and potassium, in case you were planning on metal-plating your gut.

7. Beer is safer than water

If you're someplace where you are advised not to drink the water, the local beer is always a safer bet. It's even safer than the local bottled water. Beer is boiled in the brewing process and is kept clean afterwards right through the bottle being capped and sealed, because if it isn't, it goes bad in obvious ways that make it impossible to sell. Even if it does go bad, though, there are no life-threatening bacteria (pathogens) that can live in beer. So drink up – even bad beer is safer than water.

8. Beer prevents heart attacks

If you want to get a bit more cutting-edge than vitamins, beer has other goodies for you. You've heard of the French Paradox, how the French eat their beautiful high-fat diet and drink their beautiful high-booze diet and smoke their nasty goat-hair cigarettes, but have rates of heart

disease that are about one-third that of the rest of the world? It's been credited to red wine and the antioxidants it contains. Hey, guess what else has lots of antioxidants, as many as red wine? Dark beer! According to the American Heart Association, "there is no clear evidence that wine is more beneficial than other forms of alcoholic drink." One study profiled in the British Medical Journal in 1999 said that the moderate consumption of three drinks a day could reduce the risk of coronary heart disease by 24.7 per cent.

9. Beer fights cancer

The most amazing beer and health connection is something called xanthohumol, a flavonoid found only in hops. Xanthohumol is a potent antioxidant that inhibits cancer-causing enzymes, "much more potent than the major component in soy," according to Dr. Cristobal Miranda of the Department of Environmental and Molecular Toxicology at Oregon State University. This xanthohumol stuff is so good for you that the Germans have actually brewed a beer with extra levels of it.

10. Beer does not give you a beer belly

A study done by researchers at the University College of London and the Institut Klinické a Experimentální Medicíny in Prague in 2003 showed no connection between the amount of beer people drank and the size of their overhang. "There is a common notion that beer drinkers are, on average, more 'obese' than either non-drinkers or drinkers of wine or spirits," the researchers said. But they found that "the association between beer and obesity, if it exists, is probably weak." Most studies have found that people who drink beer regularly (and moderately) not only don't develop beer bellies – they weigh less than non-drinkers. Beer can boost your metabolism, keep your body from absorbing fat and otherwise make you a healthier, less disgusting slob. Just drink it in moderation, as part of an otherwise healthy diet.

So that's it. Drink beer. You'll live longer and be happier. You won't get fat. In fact, you may weigh less. You'll boost your metabolism, improve your health and reduce your risk of clogged arteries, heart attack and cancer. What more could you want?

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Air quality

Delhi: Least polluted November since 2015, but average air quality still 'very poor' (The Indian Express: 201901202)

<https://indianexpress.com/article/cities/delhi/least-polluted-november-since-2015-but-average-air-quality-still-very-poor-6145892/>

This November had the highest average minimum temperature, 15 degrees Celsius, in the last nine years, as per data from the IMD. The normal value is 12.9 degrees Celsius. The city, however, received lower than normal rain fall this time, 1.1 mm, as opposed to a normal of 5.6

Delhi: Rain, strong winds push pollutants away, air now in 'satisfactory' range

Strong winds, rain give Delhi best air day in two months

Delhi's air quality improved in last three years: Javadekar informs Rajya Sabha

Weather forecast Today Live Updates: Delhi-NCR wakes up to smoggy morning; J&K likely to receive fresh snow

The Indian Express analysed AQI figures released by the CPCB of five Novembers since 2015, and found that the 30-day average was the lowest this year. The highest average AQI, 374, was witnessed in November 2016.

Though the average air quality index (AQI) for the month stood at 312, in the 'very poor' category, the national capital just witnessed its least polluted November in the last five years, data analysed by The Indian Express shows.

AQI is used by agencies to measure how polluted the air is. Every day, the Central Pollution Control Board (CPCB) releases the 24-hour average AQI of around 100 cities and towns, including Delhi and NCR areas. The daily AQI reports started to be made public in May 2015.

The Indian Express analysed AQI figures released by the CPCB of five Novembers since 2015, and found that the 30-day average was the lowest this year. The highest average AQI, 374, was witnessed in November 2016.

While the method of calculating AQI has been the same since 2015, the number of monitoring stations has gone up from seven then to 37 now — which gives a more comprehensive picture.

A senior CPCB official explained, "Even though the average AQI is much above the desired standard, it has been improving every month in the past three years. A major factor behind the change witnessed this November is favourable meteorological conditions, but there are also more efforts on the ground by all agencies involved in pollution control."

Delhi's air quality usually starts to dip by the end of October and bad air days continue till the end of January. The onset of bad air days is a result of changing wind speed and direction, lower temperatures and a range of regional and external emissions, including emissions from crop residue burning in farms in northwest Indian states, and crackers burst on Diwali.

CPCB data shows that pollution levels usually spike in the national capital in the days around the festival. On November 7, 2018, Diwali day, the air quality was in the 'poor' range, but fell to 'very poor' the following day and worsened to 'severe' or near 'severe' for the next five days. Improvement was noticed only November 14, 2018, onwards.

A similar trend was noticed this year and in 2016, in which the air quality plummeted to the 'severe' category in the days after the festival.

Tamil Nadu: 15 dead as wall collapses in Coimbatore, heavy rain predicted

Dayafter Rahul Bajaj spoke up, BJP and ministers hit back

Jailed for sedition, PM scholarship student struggles to put his life back together

Kuldeep Srivastava, scientist at the India Meteorological Department (IMD), said the period around Diwali usually sees lower wind speed and no rainfall: "All the factors leading to accumulation of pollutants become active at the same time in this period. You have low wind

speed, emissions from firecrackers, stubble burning, vehicular traffic in the city due to festivities, and other sources.”

CPCB data revealed that November 2019 saw seven ‘severe’ air quality days, when AQI was above 400. Last November had seen five such days.

The highest AQI in the last five Novembers, 497, was witnessed on November 6, 2016. The second highest, 494, was seen on November 3 this year. The city saw three ‘moderate’ air quality days this year, when AQI is between 100 to 200, as compared to one last year and none in the three Novembers before that. This year, the city also witnessed its first ‘satisfactory’ air quality day in November in five years, when AQI is below 100.

The difference this year, Srivastava added, has been more days with stronger winds that peaked at around 35km/hour and helped disperse pollutants, along with scattered rainfall towards the end of the month and higher minimum temperature.

Explained: What Fundamental Duties mean

On colder days with calm wind speed, pollutants remain suspended in the air closer to the surface whereas on warmer days with sunlight and wind they move further up and disperse.

This November had the highest average minimum temperature, 15 degrees Celsius, in the last nine years, as per data from the IMD. The normal value is 12.9 degrees Celsius. The city, however, received lower than normal rain fall this time, 1.1 mm, as opposed to a normal of 5.6 mm.

In 2016, during the ‘Great Smog of Delhi’, when the most number of severely polluted days were recorded in November, meteorology had again played an important part. The senior CPCB official said intrusion of dust particles from the Arabian peninsula were recorded over the city and parts of NCR around that time.

The CPCB official said the improvement noticed in the average AQI of this past month was “statistically significant” if compared with AQIs of the previous four Novembers.

He said measures such as closure of the Badarpur Thermal Power Station in October 2018 and opening of a peripheral expressway around Delhi the same year have proven effective. It also includes heavy fines imposed on vehicles violating pollution under check (PUC) norms under the revised Motor Vehicles (Amended) Act, enforced in September.

Behaviour against HIV+ people: Vardhan

Shun discrimination in thoughts and behaviour against HIV+ people: Vardhan (The Business Standard: '201901202)

https://www.business-standard.com/article/pti-stories/shun-discrimination-in-thoughts-and-behaviour-against-hiv-people-wardhan-119120100594_1.html

Health Minister Harsh Vardhan on Sunday called upon citizens to shun any kind of discrimination in thoughts, actions and behaviour towards the people suffering from HIV and AIDS.

He was speaking after inaugurating an event celebrating the World AIDS Day, organised by the National AIDS Control Organization.

"Let us shun any kind of discrimination in our thoughts, actions and behaviour in our interaction with those who have HIV and AIDS. Let us do away with nomenclatures such as 'AIDS/HIV communities'. Let us not bracket people who suffer from and have survived various diseases," Vardhan said.

Despite making progress, there are still some significant milestones that need to be achieved for making the country free of HIV/AIDS by 2030, he said.

Vardhan commended the contribution of the partner communities who have played a significant role in spreading information about the disease, to dispel misinformation, fear and apprehensions and helped people to access testing and treating services of NACO.

"You are our pillars of strength who have built bridges with the underserved, un-served and marginalised communities," he said.

The global theme of this year's World AIDS Day is 'Communities Make A Difference'. At the event, he awarded the various Red Ribbon Clubs which have mobilised the youth and communities across the country.

More than 1,200 Red Ribbon Clubs have contributed to this collective effort, he said.

Vardhan said that during 2018-19, around 79 per cent of people living with HIV knew their HIV status, 82 per cent diagnosed with HIV infection were receiving free antiretroviral therapy and 79 per cent were virally suppressed.

"This means we are on the right track and our continued efforts coupled with calibrated momentum shall make this target achievable. NACO has revived and revamped its conventional prevention strategies to achieve the new targets. NACO is focusing on the combination of prevention tools and methods that are needed to end the AIDS epidemic," he said.

The minister added the programme has also given focused attention to elimination of mother to child transmission of HIV.

(This story has not been edited by Business Standard staff and is auto-generated from a syndicated feed.)

A single healthcare scheme

Chhattisgarh: A single healthcare scheme to raise efficacy, accountability (The Indian Express: '201901202)

[https://indianexpress.com/article/india/chhattisgarh-a-single-healthcare-scheme-to-raise-
efficacy-accountability-6145898/](https://indianexpress.com/article/india/chhattisgarh-a-single-healthcare-scheme-to-raise-efficacy-accountability-6145898/)

The idea, the state government said, was to fix accountability on the state health infrastructure itself, and to lessen the amount of public money that was going to the private sector under the insurance model.

Jailed for sedition, PM scholarship student struggles to put his life back together

A health camp in Surguja, Chhattisgarh. (Express)

The Chhattisgarh government recently announced that it was shifting from an “insurance model” to a “trust model” in the field of healthcare and that as many as six insurance schemes run by the state government and the centre would now be subsumed in a single new healthcare scheme, which would be run by the state government. The idea, the state government said, was to fix accountability on the state health infrastructure itself, and to lessen the amount of public money that was going to the private sector under the insurance model.

On November 15, after a meeting of the state cabinet, a press statement stated that the state was entering a “new phase of healthcare”. Accordingly, a new scheme — Dr Khubchand Baghel Swasth Sahayata Yojana — will provide coverage up to of Rs 5,00,000 per year to not only Pradhanmantri Jan Arogya Yojana families but also to Pradhnikta & Antoyaday Ration cardholders. The new scheme will increase the beneficiary family count from 42 lakhs to 56 lakhs families. “The scheme will be implemented in Trust mode (assurance),” the cabinet release said.

Health Minister TS Singhdeo told The Indian Express that the primary aim is to fix accountability on the healthcare system itself and to increase the financial efficacy of the department. “The job of the minister must be to increase delivery through the pyramid structure which has mitanins (who are the ground-level health workers) at the base and medical college doctors at the top... We took this up as a challenge on several fronts. One could be the financial aspect. Second is the better use of public funds. And the third is (the) deliverables,” he said. Singhdeo explained that the state had as many as six overlapping schemes where the services were being delivered. “What was being provided by one scheme was also being provided by two-three schemes, ” he said, claiming that this has been streamlined.

The minister also said that under the existing “insurance model” there were suspicions of misuse of funds. “In our system, we are fixing accountability on ourselves,” he said.

On the financial benefits the new scheme will accrue, Singhdeo said, “We have not asked for a paisa more than the Rs 845 crore that is the budget for the insurance schemes as well as Rs 277 crore from the Centre. This amount of money, where is it going? As we saw it, straight away 15 per cent of public money was going into the administrative expenses of the insurance company. This was around Rs 100 crore. We want to minimise that. So within the same budget, we make a saving. Take on the responsibility to deliver and have the funds for strengthening your public infrastructure. Part of the 15 per cent will go to the government’s administrative costs but it will not be more than half, so half you will be saving.”

Bacteria⊗Navbharat Times: '201901202)

<http://epaper.navbharattimes.com/details/78325-51589-1.html>

क्लाइमेट को गंदा कर रही गैस को खा जाएगा यह बैक्टीरिया

■ नई दिल्ली :

इस्राइल के रिसर्चर्स ने एक ऐसा बैक्टीरिया विकसित किया है जिससे ग्रीन हाउस गैसों को कम करने में बहुत बड़ी मदद मिलने वाली है। यह बैक्टीरिया हमारे वातावरण में कार्बन डाइऑक्साइड कम कर देंगे। मीडिया रपटों के मुताबिक इस बैक्टीरिया को इस्राइल के वेइजमैन इंस्टिट्यूट ऑफ साइंस ने सिर्फ कार्बन डाइऑक्साइड खाने के लिए विकसित किया है। ये बैक्टीरिया, जो हवा में कार्बन से अपने शरीर का पूरा बायोमास बनाते हैं, हमारे वातावरण में ग्रीनहाउस गैस को कम करने और ग्लोबल वार्मिंग के खिलाफ लड़ाई में भविष्य में मदद कर सकते हैं।

स्टडी के मुताबिक इस बैक्टीरिया को लगभग एक दशक की लंबी प्रक्रिया के बाद पूरी तरह से जांच करके तैयार किया गया है। पहले जहां ये बैक्टीरिया

शुगर खाकर कार्बन डायऑक्साइड बनाते थे, वहीं सी-प्रोग्रामिंग के बाद यह कार्बन डायऑक्साइड कंज्यूम कर शुगर बनाने लगे। यानी इन्होंने जीवित रहने के लिए वायुमंडल में मौजूद कार्बन का उपयोग किया। वैज्ञानिकों ने अपने लैब में बैक्टीरिया को जीनोम के रूप में शामिल किया। इसके अलावा, उन्होंने बैक्टीरिया में एक जीन डाला जो उन्हें फॉर्मेट नामक पदार्थ से ऊर्जा पहुंचा देता है। हालांकि बैक्टीरिया की डाइट बदलने के लिए बस यही काफी नहीं था। बैक्टीरिया में दोबारा प्रोग्रामिंग करने के लिए उन्हें धीरे-धीरे



**यून चीफ बोले, कहीं
पछताना न पड़े**

एपी, मैड्रिड : संयुक्त राष्ट्र के सेक्रेटरी जनरल एंतोनियो गुतेर्रेस ने क्लाइमेट चेंज पर चेतावनी देते हुए कहा है कि अभी तक पूरी

दुनिया में इसे लेकर जो

प्रयास हुए, वे पर्याप्त नहीं

है। अगर ऐसे ही चलता

रहा तो पछताना पड़ेगा।

उन्होंने यहां पत्रकारों से

बातचीत करते हुए कहा

कि 2015 के पेरिस

समझौते के तहत पूरी

दुनिया वैज्ञानिक जानकारी और

तकनीक के जरिए ग्लोबल वार्मिंग

को 1.5 डिग्री सेल्सियस पर तो

रख लेगी लेकिन असली समस्या

राजनीतिक इच्छाशक्ति का न होना

है। हमें प्रकृति के खिलाफ जारी

अपने 'युद्ध' को रोकना होगा।

शुगर से अलग किया गया। बैक्टीरिया को हर प्रोसेस में कम से कम मात्रा में शुगर दी जाने लगी। छह महीने बाद इस बैक्टीरिया ने कार्बन डाइऑक्साइड को खाना बनाना शुरू कर दिया। (एनबीटी)



Oliv Oil (Hindustan: '201901202)

https://epaper.livehindustan.com/imageview_415823_96755286_4_1_02-12-2019_16_i_1_sf.html

कई प्रकार के डिमेंशिया से बचाव करता है जैतून का तेल



सेहत

लंदन | एजेन्सी

जैतून के तेल (एक्स्ट्रा वर्जिन ऑलिव ऑयल) का सेवन करने से टाऊ प्रोटीन दिमाग में जमा नहीं होता और डिमेंशिया (भूलने की बीमारी) होने का जोखिम कम होता है। दिमाग में हानिकारक टाऊ प्रोटीन के जमा होने से ही डिमेंशिया का

खतरा बढ़ता है। एक हालिया शोध में यह दावा किया गया है। ऑलिव ऑयल में मौजूद मोनोसैचुरेटेड फैटी एसिड और अच्छी वसा के कारण यह कोलेस्ट्रॉल को कम करने और दिल की बीमारियों से बचाने में मदद करता है। एक्स्ट्रा वर्जिन ऑलिव ऑयल का सेवन करने से दिमाग को सुरक्षा मिलती है और बुद्धिमत्ता को फायदा होता है।

चूहों पर किए गए शोध में पता चला कि इस ऑलिव ऑयल के



सेवन से उनके सीखने और प्रदर्शन करने की क्षमता में सुधार हुआ। इस तेल में ज्यादा मात्रा में पॉलीफेनॉल्स होते हैं। यह मजबूत एंटीऑक्सीडेंट

है जो बीमारी को पलटने या उम्र संबंधित कमजोर याददाश्त को ठीक कर सकता है। शोध में पाया गया कि एक्स्ट्रा वर्जिन ऑलिव ऑयल के

सेवन से ऑटोफेगी में बढ़ोतरी होती है। यह एक प्रक्रिया है जिसमें दिमाग की कोशिकाएं हानिकारक पदार्थों का नष्ट कर देती हैं।

यया काम करता है टाऊ प्रोटीन

अल्जाइमर और मनोभ्रंश के अन्य रूपों में, जैसे कि फ्रंटोटेमोरल डिमेंशिया में टाऊ प्रोटीन न्यूरॉन के अंदर जमा होता है। वहीं, स्वस्थ दिमागों में टाऊ का सामान्य स्तर सूक्ष्मनिकाएं को स्थिर करने में मदद करते हैं, जो न्यूरॉन के लिए सहायक संरचनाएं हैं। इस शोध में पाया कि अतिरिक्त वर्जिन ऑलिव ऑयल का लंबे समय तक सेवन करने के कई फायदे हैं। इससे कई तरह के डिमेंशिया व अल्जाइमर से बचाव होता है।

Child Health (Hindustan: '201901202)

https://epaper.livehindustan.com/imageview_415823_96754976_4_1_02-12-2019_16_i_1_sf.html

उम्र बढ़ने पर कम होने लगती है गर्भनाल की क्षमता

उम्रदराज माताओं के बेटों में हृदय रोग का खतरा

अध्ययन

लंदन | एजेसी

ज्यादा उम्र की महिलाओं से जन्मे लड़कों में दिल संबंधी बीमारियों का खतरा ज्यादा होता है। एक हालिया शोध में यह दावा किया गया है। यूनिवर्सिटी ऑफ केंब्रिज द्वारा किए गए शोध में पाया गया कि उम्रदराज माताओं के गर्भनाल में होने वाले बदलाव के कारण उनसे जन्मे लड़कों के स्वास्थ्य को आगे चलकर नुकसान पहुंच सकता है।

35 के बाद मां बनने से मुश्किल: यह शोध चूहों पर किया गया और पाया गया कि 35 की उम्र के ऊपर मां बनने वाली महिलाओं के बेटों के साथ ऐसी समस्या हो सकती है। हालांकि, शोध में पाया गया कि देर से मां बनने वाली महिलाओं के बेटों को तो इसके नकारात्मक परिणाम भुगतने पड़ें लेकिन बेटियों में ऐसा कुछ भी देखने को नहीं मिला, बल्कि उनमें कुछ फायदा ही देखा गया। शोधकर्ताओं ने कहा कि माताओं की



बढ़ती उम्र में पोषण का बंटवारा करना मुश्किल

शोधकर्ता डॉक्टर टीना नापसो ने कहा, ज्यादा उम्र में गर्भधारण करना मां के लिए काफी महंगा साबित होता है क्योंकि उसके शरीर के लिए बच्चों के साथ पोषण का बंटवारा करना थोड़ा मुश्किल हो जाता है।

बेटियों पर प्रभाव क्यों नहीं

वैज्ञानिकों का कहना है कि शोध के दौरान देखा गया कि उम्रदराज मां और मादा भ्रूण के मामले में गर्भनाल फायदे देता हुए पाया गया। इस दौरान गर्भनाल में सकारात्मक बदलाव देखे गए जो भ्रूण के विकास को ज्यादा फायदा पहुंचाते हैं। वहीं शोध में पता चला कि नर भ्रूण के मामले में उम्रदराज माताओं का गर्भनाल कमजोर हो जाता है और ठीक से अपना काम नहीं कर पाता।

उम्र ज्यादा होने से गर्भनाल द्वारा बच्चे तक पोषण और ऑक्सीजन पहुंचाने की क्षमता कम हो जाती है।

पहली गर्भावस्था की उम्र बढ़ती जा रही है: शोधकर्ता डॉक्टर अमांडा पेरी ने कहा, महिलाओं में पहली गर्भावस्था की औसत आयु दिनों-दिन बढ़ती जा रही है, इसलिए यह समझना जरूरी है कि ज्यादा उम्र में मां बनने

वाली महिलाओं के बच्चों में वयस्क होने पर किस तरह की स्वास्थ्य संबंधी समस्याएं हो सकती हैं। शोधकर्ताओं ने कहा कि मां को गर्भ में पल रहे बच्चे से जोड़ने वाली गर्भनाल बेहद गतिशील होती है। महिलाओं की उम्र बढ़ने से होने वाले जेनेटिक बदलावों के कारण गर्भनाल के कार्य करने की क्षमता भी प्रभावित होती है।