



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Tuesday

20190326

Tuberculosis (TB)

Paradigm shift for TB control (The Hindu: 20190326)

<https://www.thehindu.com/opinion/op-ed/paradigm-shift-for-tb-control/article26636685.ece>

Ending TB by 2025 is impossible but sustaining its decline is in the realm of reality

Tuberculosis (TB) remains the biggest killer disease in India, outnumbering all other infectious diseases put together — this despite our battle against it from 1962, when the National TB Programme (NTP) was launched. All hope was pinned on mass BCG vaccination to prevent TB. In 1978, the Expanded Programme on Immunisation (EPI) began, giving BCG to all babies soon after birth and achieving more than 90% coverage. Yet, when evaluated in 1990, the NTP and the EPI had not reduced India's TB burden.

In 1993, the Revised National TB Control Programme (RNTCP) was launched, offering free diagnosis and treatment for patients, rescuing them from otherwise sure death. However, treatment is not prevention. Prevention is essential for control.

Short on control

Why did the NTP and the EPI fail? Visionary leaders had initiated a BCG vaccine clinical trial in 1964 in Chingelpet district, Tamil Nadu. Its final report (published in the Indian Journal of Medical Research in 1999) was: BCG did not protect against TB infection or adult pulmonary TB, the 'infectious' form. By then, the RNTCP was in expansion mode; experts hoped that curing pulmonary TB might control TB by preventing new infections. That assumption was without validation in high prevalence countries.

BCG immunisation does prevent severe multi-organ TB disease in young children, and must be continued but will not control TB.

In countries with 5-10 cases in a lakh people annually, curing TB sustains the low disease burden. In India, with 200-300 cases in a lakh in a year, curing TB is essential to reduce mortality, but is not sufficient to prevent transmission. By 2014-15, the RNTCP was found to be very successful in reducing mortality, but failing to control TB. Why? From when a person becomes infectious to when he/she turns non-infectious by treatment, there is a gap of several weeks during which the infection saturates contacts in the vicinity. Delays in care seeking and diagnosis are the result of lack of universal primary health care.

The way forward to control TB and to monitor its trajectory was proposed in 2009, in an editorial in *Tropical Medicine & International Health* titled “Paradigm shift for tuberculosis control in high prevalence countries”. According to the editorial, an innovative strategy was necessary.

Tamil Nadu pilot model

True to its reputation as being one of the most progressive in health management, Tamil Nadu is planning to implement this new strategy in one revenue district, Tiruvannamalai. If successful, it will be replicated in all other districts. To ensure public participation — a missing element in the RNTCP — the new model will be in public-private participation mode. The Rotary movement, having demonstrated its social mobilisation strengths in polio eradication, will partner with the State government in the TB control demonstration project.

An Indian doctor examines a X-ray picture of a tuberculosis patient in a district TB center on World Tuberculosis Day in Jammu, India, Monday, March 24, 2014. India has the highest incidence of TB in the world, according to the World Health Organization's Global Tuberculosis Report 2013, with as many as 2.4 million cases. India saw the greatest increase in multidrug-resistant TB between 2011 and 2012. The disease kills about 300,000 people every year in the country.

What is India's plan to eliminate TB?

Tiruvannamalai, a pioneer district in health management, was the first in India (1988-90) to eliminate polio using the inactivated polio vaccine (IPV), under a Health Ministry-Indian Council of Medical Research-Christian Medical College project.

The Directorate of Public Health and Preventive Medicine and the National Health Mission will lead all national, State and district health agencies, district and local administration, departments of education, social welfare and public relations and government medical college. The Rotary will ensure the participation of all players (health and non-health) in the private sector.

Last year we wrote in these columns that TB control requires the slowing down of infection, progression and transmission. Pulmonary TB causes transmission, resulting in infection which leads to progression as TB disease. To transform this vicious cycle into a virtuous cycle of TB

control, spiralling down TB prevalence continuously, transmission, infection and progression must be addressed simultaneously — this is the Tiruvannamalai TB mantra.

Health etiquette

TB bacteria float in the air, people inhale that air and get infected. The closer one is to a pulmonary TB person, the greater the probability of catching infection. We must reduce chances of transmission by insisting that the TB affected should cover their mouth and nose while coughing and sneezing and not to spit in open spaces. Only when the public at large practise cough and sneeze etiquette and refrain from spitting in the open, can we ensure that the TB affected also will follow suit. The Rotary will spearhead public education for behaviour modification, starting in all schools and continuing through to adults.

Progression to TB disease from infection can be prevented by giving World Health Organisation-recommended short-term ‘preventive treatment’. Infection is silent, but diagnosable with the tuberculin skin test (TST). Testing all people periodically is not possible. Cohorts of schoolchildren (5, 10 and 15 years) can be tested and those TST positive given preventive treatment. This tactic achieves three results at one go — an infected child gets preventive treatment and points to adults with undiagnosed TB in the household. Finally, the annual TST positive rate provides an objective measure of annual infection frequency for plotting the control trajectory.

World TB Day is observed on March 24. In 2019 the slogan was “It’s Time...” to take TB control seriously. On March 13, 2018, the Prime Minister, who was inaugurating the End TB Summit, declared that India would end TB by 2025. On September 26, 2018, the first ever United Nations High Level Meeting on TB declared the urgent agenda “United to end TB – an urgent global response to a global epidemic”. Rhetoric and declarations cannot control TB; a strategy of simultaneously using all biomedical and socio-behavioural interventions can.

Ending TB by 2025 is impossible but pulling the TB curve down by 2025 and sustaining the decline ever after is in the realm of reality. True to the spirit of World TB Day theme, we laud Tamil Nadu for deciding ‘It’s time — to take bold and imaginative initiatives to create a TB control model’. Tamil Nadu, an erstwhile global leader in TB research during the 1960s through the 1990s, will now become the global leader in TB control.

Dr. T. Jacob John, a retired doctor from CMC Vellore, is Chairman, Rotary Club of Vellore TB Control Society. Dr. Shobha Varthaman is a volunteer with Doctors without Borders and a Rotarian



Sugary drinks

Sugary drinks may boost cancer growth (The Tribune: 20190326)

<https://www.tribuneindia.com/news/health/sugary-drinks-may-boost-cancer-growth/748127.html>

Fructose was first chemically changed and this process then enabled it to efficiently promote the production of fatty acids, which ultimately contribute to tumour growth.

Consuming just one or two cups of sugar-sweetened drinks daily may accelerate the growth of intestinal tumours, say scientists who also discovered how sugar can directly feed cancer growth.

Researchers at Baylor College of Medicine and Weill Cornell Medicine in the US conducted the study on mice.

“An increasing number of observational studies have raised awareness of the association between consuming sugary drinks, obesity and the risk of colorectal cancer,” said Jihye Yun, assistant professor at Baylor.

“We know that obesity increases the risk of many types of cancer including colorectal cancer; however, we were uncertain whether a direct and causal link existed between sugar consumption and cancer,” said Yun.

Researchers generated a mouse model of early-stage colon cancer where APC gene is deleted.

“APC is a gatekeeper in colorectal cancer. Deleting this protein is like removing the breaks of a car,” Yun said.

“Without it, normal intestinal cells neither stop growing nor die, forming early stage tumours called polyps. More than 90 per cent of colorectal cancer patients have this type of APC mutation,” she said.

Using this mouse model of the disease, the team tested the effect of consuming daily modest amount of high-fructose corn syrup—the equivalent of people drinking about one and half of a sugar-sweetened beverage daily—on tumour development.

The sweetened water was 25 per cent high-fructose corn syrup, which is the main sweetener of sugary drinks people consume. High-fructose corn syrup consists of glucose and fructose at a 45:55 ratio.

When the researchers provided the sugary drink in the water bottle for the APC-model mice to drink at their will, mice rapidly gained weight in a month.

To prevent the mice from being obese and mimic humans’ daily consumption of one can of soda, the researchers gave the mice a moderate amount of sugary water orally with a special syringe once a day.

After two months, the APC-model mice receiving sugary water did not become obese, but developed tumours that were larger and of higher-grade than those in model mice treated with regular water.

“These results suggest that when the animals have early stage of tumours in the intestines—which can occur in many young adult humans by chance and without notice—consuming even modest amounts of high-fructose corn syrup in liquid form can boost tumour growth and progression independently of obesity,” Yun said.

“Further research is needed to translate these discovery to people; however, our findings in animal models suggest that chronic consumption of sugary drinks can shorten the time it takes cancer to develop,” she said.

The team then investigated the mechanism by which this sugar promoted tumour growth. They discovered that the APC-model mice receiving modest high-fructose corn syrup had high amounts of fructose in their colons.

They found that sugary drinks increased the levels of fructose and glucose in the colon and blood, respectively, and that tumours could efficiently take up both fructose and glucose via different routes.

Fructose was first chemically changed and this process then enabled it to efficiently promote the production of fatty acids, which ultimately contribute to tumour growth.

“This study revealed the surprising result that colorectal cancers utilise high-fructose corn syrup, the major ingredient in most sugary sodas and many other processed foods, as a fuel to increase rates of tumour growth,” said Lewis Cantley at Weill Cornell Medicine.

“While many studies have correlated increased rates of colorectal cancer with diet, this study shows a direct molecular mechanism for the correlation between consumption of sugar and colorectal cancer,” Cantley said.

“Our findings also open new possibilities for treatment,” Yun said. PTI

Open heart surgery

TAVR is useful for young patients too’ (The Hindu: (The Tribune: 20190326)

<https://www.thehindu.com/news/cities/Delhi/tavr-is-useful-for-young-patients-too/article26638424.ece>

Until now, this procedure had been reserved for old patients who might not survive open heart surgery

India is currently witnessing a burden of cardiovascular diseases (CVD) which led to over one quarter of deaths in 2015. The incidence of CVD among young population (25 to 39 years) is between 12% and 16%. The cause being attributed to sedentary lifestyle and other factors such as high cholesterol, high blood pressure, diabetes and obesity.

A recent study by Columbia University has found that replacement of the aortic valve with a minimally invasive procedure called transcatheter aortic valve replacement (TAVR) has proved effective in young patients. Until now, TAVR had been reserved for old and sick patients who might not survive open heart surgery.

Dr. Naresh Trehan, chairman & managing director of Medanta Heart Institute, Gurugram, speaks to The Hindu about TAVR.

How does TAVR help the ‘newly’ vulnerable population in India ?

Technology-enabled patient care is improving efficiency in end-to-end healthcare. In healthcare delivery, patient-centric solutions powered by technology are improving care and management, resulting in better patient engagement and satisfaction.

Delivered by a team of cardiologists and cardiac surgeons, TAVR is a minimally invasive non-surgical procedure deployed to replace the aortic valve, one of the four valves of the heart. While this procedure is commonly prescribed to high-risk patients, including the old and sick who are unsuitable candidates for open heart surgery, a recent study by Columbia University has established that it is just as useful in younger, healthier patients.

In this procedure, a small hole or incision is made in the groin through which a catheter is inserted. In India, about 15 lakh patients suffer from severe aortic valve stenosis (narrowing of the aortic valve) with typical symptoms of shortness of breath, chest pain, syncope and this new development is a significant evolution in the standard care for patients.

Is TAVR better than previously available technologies? Depending on their age, genetic makeup, disease stage and manifestation, each patient and their condition is unique. One standard prescription does not apply to all. Treatment approach in every case can be arrived at after a consultation with a multidisciplinary group of medical and surgical heart specialists who together determine the best suited option.

TAVR is specifically useful for patients who cannot tolerate surgery for heart valve replacement because of old age or co-morbid conditions. It allows for new valves to be inserted through an incision in the leg, threaded up to the heart using advanced imaging techniques, and then secured in place.

This results in faster recovery and lowers post-operative risks.

What is the burden that we are seeing in India and how is the younger population being affected?

Heart attacks were earlier associated with people in their late 50s or 60s. However, over the last few years, younger individuals in the age group of 20-40 are increasingly suffering from heart ailments.

Heart disease at prime age takes away productive years from the youth. According to a study published in the Journal of the American College of Cardiology, while the mortality rate due to CVDs declined by 41% in the USA over the last 15 years, it rose to 34% in India. Apart from non-modifiable factors such as age, gender and genetics, the risk factors for CVDs include high blood pressure, diabetes, deranged blood lipids, smoking, physical inactivity, obesity and stress among others. Cardiovascular diseases to a great extent can be reversed with lifestyle modifications. Making simple changes in what you eat, how often you exercise, how much you weigh and how you manage stress can help put the brakes on heart disease.

What are the other newest technologies that are working?

Technological advancements are redefining the future of healthcare. Tele Medicine, an advanced form of video conference, is finding greater applicability in India where accessibility to healthcare is still a challenge. This simple but highly scalable model is the right platform to achieve larger goals in primary health, continuity of care and second opinion.

With advancement of wearable technologies, connected bio-medical devices and enhanced computing, Internet of Things (IOT) and Big Data are helping improve patient care, amplify efficiencies and reduce costs of healthcare delivery through ICU supervision, remote patient monitoring, chronic disease management and predictable surgical outcomes.

Complicated surgeries are now being done robotically with higher accuracy, minimum invasion and smaller scars, offering quicker recovery to patients.

Technology is revolutionising the way healthcare is being delivered. This will only get further augmented with the interplay of artificial intelligence and virtual reality offering superior and more predictable outcomes.

Loneliness

Embracing loneliness: a modern guide (The Hindu: 20190326)

<https://www.thehindu.com/opinion/columns/embracing-loneliness-a-modern-guide/article7122999.ece>

If you get the knack of being alone it can be a luxury you'll learn to love

Loneliness can creep through your bones like a disease, wash over you unexpectedly as if a stranger's vomit, or sit in the pit of your stomach for weeks like undigested chewing gum. Especially, it turns out, if you're young.

A survey carried out by Opinium for The Big Lunch has found that 83 per cent of 18-to 34-year-olds have experienced the dull, quiet ache of being lonely, which is no surprise to me.

Of course it's easy to be lonely in your 20s. You may sit in an office of 50 people, but if you email your colleagues rather than exchange gossip over tea in the communal kitchen then it's hard to feel truly part of a group. If you sit on a sofa with your flatmate silently scrolling through everybody tweeting about a party you didn't go to, you may well start to feel socially estranged. Is it so surprising that 28 per cent of people under 35 wish they had more friends?

Our constant state of remote social interaction is a twin spear of loneliness; we are both aware of all the people out there having more fun than us, while being slipshod about making our own plans. Organising drinks with friends is often little more than a rolling set of text-based delays. Are you free on Tuesday? Maybe — I'll let you know on Monday. Do you want to do something this evening? Perhaps — let me see if I can get out of this work thing. Are you on your way? Sorry — I've just been held up in a meeting, but perhaps we could meet later instead?

There is something altogether lonelier about hanging suspended in social limbo than facing a blank diary. Because many people under 35 have failed to learn the noble art of being alone. Just as those four-hour car journeys to visit your granny with nothing but three rubber bands, a pencil and the swaying nausea of travel sickness used to teach us how to deal with boredom, our pre-mobile phone lives once taught us how to deal with loneliness.

I remember walking through Leeds during my first week of university utterly alone, lost, looking for Argos. It was a petri dish of potential loneliness and yet, rather than reaching for Google maps, I went into a baker to ask for directions. I ended up spending the next few minutes talking to a woman with a face the consistency of a floured bap about electric blankets. It was wonderful. And, although only 10 years ago, it now sounds like something from a Thomas Hardy novel, especially to a modern 21-year-old with a smartphone embedded in their fist.

The problem, of course, isn't being alone, but in how we think about being alone. We fear it, pity it, do anything in our power to avoid it. And yet, in the modern frenzy of social media, smartphones and overpopulated cities, loneliness can be a luxury. Isolation, silence, the longing to be among people and forced self-reflection are all incredibly useful, especially if you want to achieve something creative.

Being on your own is how you learn to value company. Silence is what gives value to conversation. Having nobody to ask is how you work out what you really want. It may not always feel like it, but loneliness can be incredibly productive.

Being on your own is a knack, one that takes practice, and not learning it may actually be fatal: research published by Brigham Young University last month showed that loneliness can increase risk of premature death by up to 30 per cent. So you must be prepared to talk to strangers and make plans that don't rely on others. Not just because your friends are a fickle bunch of thumb-active flakes but because doing so directly affects your chances of living to see the wrinkled side of 60.

And you are alone. Whatever your Facebook feed says. As Orson Welles, that cleft-chinned citizen of the lonely world, once said: "We're born alone, we live alone, we die alone. Only through our love and friendship can we create the illusion for the moment that we're not alone."

You can fight loneliness, learn to love isolation, make use of the discomfort of time on your own and come to realise that sometimes the best tunes come in solos. And as you eat your sandwich in a deserted park or sit at home listening to the drip of a tap, remember this: you're not alone in feeling lonely. — © Guardian Newspapers Limited, 2015

Human Brain (The Asian Age: 20190326)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=12693341>

'Humans can feel change in earth's magnetic field'

Washington: Many people are able to unconsciously detect changes in the Earth's magnetic fields, according to scientists who claim to have found concrete evidence of a new human sense — magnetoreception.

Researchers from California Institute of Technology in the US and the University of Tokyo in Japan offer experimental evidence that human brain waves respond to controlled changes in Earth-strength magnetic fields.

"Many animals have magnetoreception, so why not us?" said Connie Wang, lead author of the *eNeuro* study published in the journal *eNeuro*.

For example, honeybees, salmon, turtles, birds, whales, and bats use the geomagnetic field to help them navigate, and dogs can be trained to locate buried magnets.

It has long been theorised that humans may share a similar ability. However, despite a flurry of research attempting to test for it in the '80s, it has

► **Researchers from both institute offered experimental evidence that human brain waves respond to in Earth-strength magnetic fields**

never been conclusively demonstrated. "Aristotle described the five basic senses as including vision, hearing, taste, smell, and touch," said Joseph Kirschvink, from Caltech.

"However, he did not consider gravity, temperature, pain balance, and several other internal stimuli that we now know are part of the human nervous system," said Kirschvink.

— PTI

Bad' blood

Bad' blood kills 15 pregnant women in Tamil Nadu in 4 months (The Times of India: 20190326)

<https://timesofindia.indiatimes.com/city/chennai/15-pregnant-women-died-in-tn-after-getting-poorly-stored-blood/articleshow/68570819.cms>

CHENNAI: At least 15 pregnant women died in three government hospitals in Tamil Nadu in four months until January 2019 owing to the side-effects of “lysed” blood transfusion. A preliminary inquiry has found that blood stored in inappropriate temperature turned stale, yet some doctors certified them safe.

Senior doctors and officials, who conducted maternal audits and inspected blood banks in Dharmapuri, Hosur and Krishnagiri government hospitals, found transfusing such “spoiled” blood led to the death of pregnant women and mothers. “In many cases women had severe complications and side-effects, including fits, minutes after they were transfused blood. The blood volume in some cases was lower than 50ml,” said a senior health official who did not want to be quoted.

State health secretary Beela Rajesh has ordered criminal action as well as disciplinary proceedings against three blood bank officers — Dr M Chandrasekar, working with of the Government Medical College and Hospital; Dr Narayanaswamy, working with Krishnagiri District Headquarters Hospital; and Dr Sugantha of the Hosur Government Hospital — besides more than a dozen staff nurses and lab technicians.

In a letter, the health secretary has asked the director of medical education, Dr A Edwin Joe, and the director of medical services, Dr N Rukmani, to file criminal complaints and initiate disciplinary action as per Tamil Nadu Civil Services (Discipline and Appeal) Rules for negligence. The doctors and paramedics could be terminated from service if they were appointed on contract or outsourced. She has asked the department to file a complaint against the medical practitioners with the Tamil Nadu State Medical Council and submit an action-taken report. Complaints against nurses and lab technicians will also be lodged with the respective councils.

The maternal death audit ruled out all possible reasons of death before concluding it was due to lysed blood. “During blood bank inspections, even non-medical professionals could see the difference between good blood and lysed blood. Yet, the blood bank managers chose to keep them in the blood bank. What’s more, the doctors certified them safe,” said a senior health department official.

No trial needed just give the same BLOOD to doctors to nurse to helpers who ever was involved in the murder

Around the same time as these maternal deaths in November 2018, a Sattur-based woman tested positive for HIV after she was given infected blood. The blood bank manager in that case had certified the blood as safe

Recommendations for legal and disciplinary action in the case were made by Tamil Nadu AIDS Control Society project director K Senthil Raj, who also heads the State Blood Transfusion

Council. He investigated the cause of all maternal deaths and frequent increase in blood transfusion reactions at these centres.

Snacking

Snacking while watching TV is bad for the heart (The Times of India: 20190326)

<https://timesofindia.indiatimes.com/home/science/snacking-while-watching-tv-is-bad-for-the-heart/articleshow/68572726.cms>

Teenagers who sit for hours watching TV, using the computer or playing video games while eating unhealthy snacks are at increased risk heart diseases and diabetes, scientists say.

The study found these teens are at risk of developing metabolic syndrome — a cluster of risk factors including increased blood pressure, high blood sugar, excess body fat around the waist, and abnormal cholesterol or triglyceride levels — that elevate the risk of heart disease, stroke and diabetes. The take home message is limiting your screen time is important, but when it is not possible, avoiding snack consumption may help you to reduce your risk of metabolic syndrome,” said Beatriz Schaan, of the Universidade Federal do Rio Grande do Sul in Brazil.

The study included data on 33,900 teens ages 12 to 17. The researchers measured the teens’ waists and blood pressure, and took blood samples to measure blood glucose, HDLcholesterol, and triglycerides.

They found 2.5% of the teens had metabolic syndrome. Those who spent six or more hours a day in front of screens were 71% more likely to have metabolic syndrome compared with those who spent less time in front of screens

Download The Times of India News App for Latest Home News.

Cancer

Preventive drugs are overused at the end of life in older cancer patients (New Kerala: 20190326)

<https://www.newkerala.com/news/read/117858/preventive-drugs-are-overused-at-the-end-of-life-in-older-cancer-patients.html>

A new research has reported that preventive medications such as those to lower blood pressure or cholesterol, or to protect bone health, among others, are commonly prescribed during the

last year of life of older adults with cancer, even though they are unlikely to provide meaningful benefits.

The research published in the *CANCER* journal, a peer-reviewed journal of the American Cancer Society, points out the need for efforts to reduce the burden of drugs with limited clinical benefit near the end of life.

Many older adults take multiple medications concomitantly, which increases the risk of experiencing serious side effects. For older patients with cancer, the benefit of each additional medicine gradually decreases while the risk of harm increases as the illness progresses and prognosis worsens.

Benefits may be especially limited for preventive drugs since these drugs often take several years to achieve their goal. In the context of advanced cancer, the added value of starting or continuing preventive drugs becomes questionable since the patient's remaining life expectancy may be too short to observe any of the intended benefits.

There is limited information on the extent to which such medications are prescribed to patients with advanced cancer before death. Lucas Morin, MS, of the Karolinska Institute, and his colleagues evaluated the prescribing of preventive drugs throughout the final year of life of older adults with cancer who died between 2007 and 2013 across Sweden. The team also estimated the direct costs of such preventive drugs.

Among 151,201 older patients who died with cancer, the average number of drugs increased from 6.9 to 10.1 throughout the last year of life, and the proportion of individuals using 10 or more drugs rose from 26 per cent to 52 per cent. Preventive drugs, including antihypertensives, platelet aggregation inhibitors, anticoagulants, statins, and oral antidiabetics, were frequently continued until the final month of life.

Median drug costs during the last year of life amounted to \$1,482 per person, including \$213 for preventive therapies. Preventive drugs accounted for approximately one-fifth of the total costs of prescribed drugs, and this proportion decreased only slightly as death approached.

Costs for preventive drugs were especially high in older adults who died with pancreatic cancer, breast cancer, or gynaecological cancers.

The findings suggest that reducing the use of preventive medications in people with advanced cancer near the end of life has the potential to not only reduce unnecessary side effects and improve patient quality of life but also to reduce financial burdens for patients.

Although the preventive drugs reported in our study are most often pharmacologically and clinically appropriate in the general population, their use in the context of limited life expectancy and palliative goals of care should be examined critically, said Morin.

Our finding that older adults with poor-prognosis cancers, including cancers of the brain, lung, liver, and pancreas, were just as likely as those with a less aggressive disease to use preventive drugs during their last month of life suggests that there is room for deprescribing.

Uterine fibroid embolisation

Uterine fibroid embolisation safe and as effective as surgical treatment (New Kerala: 20190326)

<https://www.newkerala.com/news/read/117815/uterine-fibroid-embolisation-safe-and-as-effective-as-surgical-treatment.html>

A new research has established that uterine fibroid embolisation (UFE) effectively treats uterine fibroids with fewer post-procedure complications compared to myomectomy.

The study was presented at the Society of Interventional Radiology's 2019 annual scientific meeting.

Women who received this minimally-invasive treatment also had a slightly lower need for additional treatment than those who underwent surgery.

UFE is a minimally-invasive treatment for uterine fibroids that is less painful, preserves the uterus and allows women to get back to their lives sooner than surgical options.

However, past research suggests that US women, a majority of who will experience uterine fibroids by the age of 50, are largely unaware of the UFE.

Women have options for treating their uterine fibroids. UFE and myomectomy are procedures with similar efficacy and durability for treating fibroids, but the UFE has fewer complications and shorter hospital stays, said Jemianne Bautista-Jia, MD, radiology resident at Kaiser Permanente and lead author of the study.

There are important factors women should consider when choosing between the procedures. These factors include a risk of bleeding, a possibility of infections, and recovery time, said Bautista-Jia.

A uterine fibroid (leiomyoma) is a noncancerous tumour that occurs in the muscle cells of the uterus. These growths do not spread to other regions of the body and are typically not dangerous.

While some women do not experience symptoms, others have very heavy and prolonged bleeding that can be debilitating, as well as pelvic pain and abdominal enlargement.

In the retrospective cohort study, researchers analysed the treatment outcomes of 950 uterine fibroid patients from January 1, 2008, through December 31, 2014. Half of the patients underwent the UFE, a non-surgical treatment that eliminates the blood supply to fibroids, causing them to shrink or disappear. The other half was treated surgically through myomectomy, a procedure that removes existing fibroids.

After an average seven-year follow up, the study found out that women who underwent myomectomy had a higher rate of postprocedural complications, including a 2.9 per cent rate of blood transfusion, which was significantly higher than the 1.1 per cent rate for those who were treated using the UFE.

Patients in both the treatment groups demonstrated a significant increase in haemoglobin one year after the initial procedure due to reduced bleeding. The two methods were comparably effective based on the rate at which secondary interventions, including the UFE, myomectomy, and hysterectomy, were needed.

Second interventions were completed in 8.6 per cent of women who received an initial UFE compared to 9.9 per cent for women who initially underwent a myomectomy.

This study also showed similar rates of miscarriage for women who underwent either the UFE or myomectomy. Future research should explore the impact of all uterine-sparing fibroid procedures on pregnancy, which still remains poorly understood.

Treatments for uterine fibroids can range from monitoring the fibroids or administering medications to relieve the symptoms, to more invasive approaches, such as myomectomy and hysterectomy.

Artificial pancreas

Artificial pancreas to boost diabetes treatment (New Kerala: 20190326)

<https://www.newkerala.com/news/read/117751/artificial-pancreas-to-boost-diabetes-treatment.html>

Australian researchers have created the world's first machine intelligent artificial pancreas that could improve insulin dosing for diabetics.

According to Nigel Greenwood, founder at Australia-based firm Evolving Machine Intelligence, along with researchers from the University of Queensland (UQ), the artificial intelligence-based (AI) technique can also transform the way aeroplane engine's wear iamp; tear is monitored.

"Our technology can recommend the best insulin dosage to keep each individual patient's blood glucose levels under control with unprecedented stability and safety," Greenwood said. "It will allow for better and more accurate treatment than we've ever seen," he said.

The researchers also applied the same AI technique to aviation turbine engines and their related systems to predict engine component degradation and plan services to improve performance.

The AI "allows us to evolve computational models of aviation engines as if they were organisms and it can explain explicitly what it thinks is happening inside the engine", said Ingo Jahn, mechanical engineer at UQ.

Greenwood said the AI system learns by forcing mathematical models to evolve, quite literally by using simulated chromosomes, to fit known information.

Obesity causes

Obesity causes early onset of puberty, says study (New Kerala: 20190326)

<https://www.newkerala.com/news/read/117744/obesity-causes-early-onset-of-puberty-says-study.html>

Obese boys and girls are likely to enter puberty at an early age, which can result in stunted growth or depression, finds a new study.

The study showed total body obesity and excess belly fat in boys aged four-seven years were associated with greater odds of starting puberty before age nine.

"With the increase in childhood obesity worldwide, there has been an advance in the age at which puberty begins in girls. But in boys the evidence has been controversial," said lead researcher, Maria Veronica Mericq, Professor from the University of Chile.

The study that will be presented at the ongoing ENDO 2019, the Endocrine Society's annual meeting in New Orleans, the US.

For the study, the researchers included 527 Chilean boys.

Among boys aged five or six, those with obesity had nearly 2.7 times the odds of starting puberty early. Whereas those with excess belly fat had almost 6.4 higher odds of puberty before age nine, said Mericq.

She said excess belly fat more closely related to fat mass, because a higher BMI may reflected increased muscle, especially in athletes.

Precocious or early puberty has been linked to possible problems, including stunted growth, emotional-social problems like increased risks of depression and substance abuse.

In addition, in boys, it could lead to higher incidence of testicular cancer in adulthood, said Mericq.

Controlling the obesity epidemic in children could be useful in decreasing these risks, Mericq noted.

Osteoporosis

Osteoporosis: New tools help pinpoint potential risk genes (Medical News Today: 20190326)

<https://www.medicalnewstoday.com/articles/324791.php>

A combination of powerful tools has helped scientists identify two new genes that could contribute to osteoporosis through their effect on bone density. The finding could lead to better treatments for the bone-weakening disease.

female scientist works with dna tools in lab

It may soon be possible to predict osteoporosis before it develops.

The study, by researchers at the Children's Hospital of Philadelphia (CHOP) in Pennsylvania, highlights the importance of understanding the 3D geography of the genome in locating genes that cause disease.

The team points out that identifying DNA variants, or differences, behind diseases, is not necessarily enough to locate the genes that cause the disease. The variants, for example, could be triggers of genes in other parts of the genome.

In a paper that now features in the journal Nature Communications, the researchers describe how they probed the 3D geography of DNA in bone-forming cells to locate genes that might influence bone mineral density.

They suggest that their methods could also help to study other genetic conditions, including pediatric diseases.

"The geography of the genome is not linear," says co-senior study author Struan F. A. Grant Ph.D., who is a director of the Center for Spatial and Functional Genomics at CHOP.

"Because DNA is folded into chromosomes," he explains, "parts of the genome may come into physical contact, enabling key biological interactions that affect how a gene is expressed. That's why we study the three-dimensional structure of the genome."

Osteoporosis and the genome

Osteoporosis is a disease that progressively weakens the bones and increases the risk of fracture, especially in the wrist, spine, and hip.

Bone tissue is alive and perpetually adds new bone and removes old bone. In childhood, the process favors the formation of new tissue, allowing bones to grow and get stronger.

Osteoporosis breakthrough: Bone mass increased by 800 percent

Osteoporosis breakthrough: Bone mass increased by 800 percent

Study of mice finds that blocking estrogen in the brain can boost bone density well into older age.

However, as people age, bone formation peaks and then lags further and further behind bone removal, with the result that bones get progressively less dense and weaker.

The National Institutes of Health (NIH) estimate that there are more than 53 million people in the United States who already have osteoporosis or are at high risk of developing it because of low bone mineral density.

Scientists unraveled the human genome more than 10 years ago. Since then, many genome-wide association studies (GWAS) have identified variants, or building block sequences in DNA, that are more common in people with particular diseases.

In their study paper, Dr. Grant and his colleagues state that osteoporosis has "an essential genetic component."

However, they go on to explain that while GWAS have uncovered DNA variants that are "robustly associated with bone mineral density," this is not the same as finding the genes that actually control the bone-forming process.

Vitamin D

Why too much vitamin D can be a bad thing (Medical News Today: 20190326)

<https://www.medicalnewstoday.com/articles/324772.php>

A new study on the effects of vitamin D found that too much may lead to slower reaction times and increase the risk of falling among older people.

Older adults in the sun

Vitamin D is vital, but too much may increase certain risks.

Vitamin D is an essential vitamin that helps build and maintain healthy bones and teeth.

Without this, our bodies cannot absorb calcium, which is the main component of bone.

Vitamin D may also protect against cancer and diabetes.

Our bodies synthesize vitamin D when sunlight reaches the skin.

The amount of vitamin D that our skin produces depends on several factors, including where we live, season, and skin pigmentation. During winter, vitamin D production may decrease or be completely absent.

We can also get vitamin D from salmon, sardines, canned tuna, oysters, and shrimp. People who are vegetarian can obtain this vitamin by consuming egg yolks, mushrooms, and fortified food products such as soy milk, cereal, and oatmeal.

Vitamin D in older adults

It may be harder for some older adults to absorb vitamin D because they may not get regular sun exposure. In this case, taking a vitamin supplement or a multivitamin that contains vitamin D may help boost bone health and improve memory.

Studies have linked vitamin D deficiency to conditions such as dementia, depression, diabetes, autism, and schizophrenia.

Vitamin D and brain health: New mechanism may explain link

Vitamin D and brain health: New mechanism may explain link

According to a recent study, vitamin D deficiency may damage neuronal "scaffolding."

READ NOW

As we age, it is crucial to ensure that our bodies get the right amount of vitamin D, because the risk of cognitive impairment and dementia may increase.

According to the National Institutes of Health (NIH), the recommended daily amount of vitamin D is:

infants 0–12 months: 400 international units (IU)

children 1–18 years: 600 IU

adults to age 70: 600 IU

adults over 70: 800 IU

pregnant or lactating women: 600 IU

While it is crucial to take vitamin D, excessive exposure can also pose risks. A study led by Rutgers University found that older women who are overweight or obese who took more than three times the recommended daily dose of vitamin D had slower reaction times.

Slower reaction times may increase fall risk

The Centers for Disease Control and Prevention (CDC) estimate that more than 1 in 4 adults aged 65 and older will fall each year. This equates to 29 million falls, 3 million visits to the emergency room, 800,000 hospitalizations, and 28,000 deaths.

These falls also have an impact on Medicare, resulting in more than \$31 billion in costs.

Recently, scientists at Rutgers University in New Brunswick, NJ, conducted a study looking at risk factors for falls. They published their results in *The Journals of Gerontology: Series A*.

They analyzed the effects of vitamin D on three groups of women aged 50–70 in a randomized controlled trial:

The first group took the recommended daily dose of 600 IU.

The second group took 2,000 IU.

The third took 4,000 IU.

The results showed an improvement in memory and learning in the groups that took more than the recommended daily dose. However, the same groups also experienced a slowdown in reaction times.

"The slower reaction time may have other negative outcomes such as potentially increasing the risk of falling and fractures," says senior study author Sue Shapses.

"This is possible since other researchers have found that vitamin D supplementation at about 2,000 IU daily or more increased risk of falls, but they did not understand the cause."

Sue Shapses

Shapses believes that the team's findings indicate a slower reaction time may be the reason behind the increased risk of falls.

According to the scientists, taking 4,000 IU of vitamin D per day might not be a problem for young people, but it could compromise older adults' ability to walk or catch balance to avoid a fall.

More studies are needed to determine whether slower reaction times are linked to an increase in the risk of falls and injuries.

Examining different doses of vitamin D supplementation in people of different ages and different races over a longer period could be the next step to investigate the issue further.

Cystic fibrosis

Cystic fibrosis: Existing drug may improve lung function (Medical News Today: 20190326)

<https://www.medicalnewstoday.com/articles/324775.php>

Researchers say a drug that is already available on the market can help those affected by cystic fibrosis.

Lung image on tablet

An antifungal medication may help people with cystic fibrosis.

Amphotericin, which is an antifungal medication, might help people with cystic fibrosis fight the chronic bacterial lung infections that tend to occur with this disease, according to a recent study.

"The really exciting news is that amphotericin is a medicine that is already approved and available on the market," said Martin D. Burke, Ph.D., study leader and professor of chemistry at the University of Illinois in Champaign.

This study, which appears in the journal Nature, outlines the researchers' encouraging findings.

The team used lung tissue from people who have cystic fibrosis, as well as animal models of cystic fibrosis, to see how the drug would drive changes in the tissue.

They discovered that amphotericin sparked changes in the lung tissue.

These changes have associations with improved lung function and include restoration of pH levels, increased antibacterial activity, and improved viscosity.

In addition, they explained that people could administer this medication into the lungs directly, which should reduce side effects.

Cystic fibrosis in brief

Cystic fibrosis is present at birth. Those who have the condition have a faulty protein that impacts the cells, tissues, and glands that make mucus and sweat.

With cystic fibrosis, thickened mucus can build up in affected organs. This can lead to damage or infections in these areas, which can be life-threatening.

It can also lead to inflammation that can cause problems in organs, such as the lungs or pancreas.

While cystic fibrosis can affect different organ systems, such as the digestive tract, cystic fibrosis in the lungs can cause the most severe complications.

What do the lungs do, and how do they function?

What do the lungs do, and how do they function?

In this article, we outline the function of the lungs and their primary purpose.

READ NOW

The thick mucus can create severe problems in a person's lungs, as it not only causes issues with breathing but can also lead to chronic bacterial infections.

Treatment is available, but it does not work for everyone. This is because people have different types of mutated proteins, and some people do not make any proteins at all, which can make it difficult or impossible for doctors to treat.

People with cystic fibrosis often use treatment techniques that involve loosening the mucus and may have learned different ways of breathing and coughing. Some people take prescribed medications, such as bronchodilators and mucus thinners.

The primary aim of treatment is to slow down the progression of lung disease as much as possible. This is where amphotericin may come in.

Why an antifungal medication may help

Prof. Burke noted that amphotericin has the potential to work for all people with cystic fibrosis, no matter what type of mutation they have; it can work even if that protein is absent.

"Instead of trying to correct the protein or do gene therapy — the latter of which is not yet effective in the lung — we use a small molecule surrogate that can perform the channel function of the missing or defective protein."

Prof. Martin D. Burke

The treatment would be particularly valuable for the 10 percent of people with cystic fibrosis who do not make the affected protein at all — currently, these people do not respond to any available treatment.

Scientists need to do much more research and carry out human clinical drug trials to validate these findings before doctors can offer this treatment to people with cystic fibrosis.

Healthcare

Innovations from Future Healthcare 2019 (Medical News Today: 20190326)

<https://www.medicalnewstoday.com/articles/324765.php>

This week, Medical News Today attended the Future Healthcare Exhibition and Conference. Delegates presented us with technology, both new and old, destined to push healthcare forward.

Future Healthcare 2019 Logo

Future Healthcare is an annual event that takes place in London in the United Kingdom.

It is a showcase of international innovation in the healthcare space. This year, over 350 brands attended.

We spent much of our time listening to short introductions to new products in the Health Innovators Theatre.

They all had the potential to change the way that healthcare professionals deliver and monitor healthcare.

As ever, data and the way experts manipulate them featured heavily. As one presenter asked, "Data [are] the answer, what is the question?"

However, there were also companies attempting to reinvent old technologies using a fresh approach.

Below is a brief introduction to some of the products that piqued our interest this year.

1. Detecting dementia early

Today, Alzheimer's disease — the most common form of dementia — is one of the leading causes of death in the United States. As the population's average age slowly rises, the number of deaths due to dementia are likely to rise in line.

Despite this, catching dementia early remains challenging. Oxford Brain Diagnostics believe that their technology can catch the condition years before symptoms become apparent.

Their secret lies in cortical disarray measurement (CDM). In short, this technique enables scientists to gather an "extra level of detail" from existing MRI scans. This allows them to detect changes in the microanatomy of the brain.

Dr. Steven Chance — Oxford Brain Diagnostics' CEO — told MNT that "CDM extracts information about the microscopic structure of the brain's gray matter by applying a unique analysis to a standard form of MRI scan."

"The method reveals the damage to the cerebral cortex even in the early stages of disease because it is sensitive to disruption at the cellular scale."

Dr. Steven Chance

Alongside the obvious benefits of spotting the signs of dementia earlier, the technology might also assist the pharmaceutical industry: Researchers could quantify how experimental drugs affect the microstructure of the brain.

2. Blockchain for health

Healthcare has always been about the patient, of course. However, in recent years, there has been an increasing push to involve the patient more deeply. Particularly, there has been discussion around how doctors store our data, who keeps them, and how they are shared.

Medicalchain want to change how people access their medical records. By using secure blockchain technology — most famous for its use in cryptocurrency — they have designed a way that patients can view and, when necessary, share their data with clinicians. Medicalchain have outlined their product in a white paper:

"Medicalchain enables the user to give healthcare professionals access to their personal health data. Medicalchain then records interactions with [these] data in an auditable, transparent, and secure way on Medicalchain's distributed ledger."

This technology, the company believes, would empower the patient. Also, as online consultations become more popular, this technology would help overcome some of their inherent privacy and security issues.

The company are currently in talks with the Mayo Clinic in Rochester, MN. They hope that soon, their services could be open to the public at large.

3. Mobile cancer screening

In 2018, globally, there were 570,000 new cases of cervical cancer. Around 90 percent of deaths from cervical cancer occur in low- and middle-income societies.

EVA System

The hand-held EVA System.

Better screening and earlier intervention could significantly reduce the mortality rate.

MobileODT have designed a battery-powered, hand-held colposcope called the EVA System, which can take high-quality images of the cervix.

MobileODT worked with the National Cancer Institute to develop a machine learning algorithm, called automatic visual evaluation (AVE), that can produce an accurate diagnosis in minutes.

A prospective, multicenter pilot study that scientists conducted in Korea showed that the device is more than 90 percent accurate.

Yael Misrahi — head of global partnerships at MobileODT — outlined the product at Future Healthcare. MNT caught up with her after the event, and she explained that one of the primary benefits of this system is that "it is handheld and can be used by a nonexpert healthcare provider."

Because the device is based on smartphone technology, it is user-friendly and includes a "remote consultation feature to consult experts either in real-time or during a quality assurance check."

"[W]ith AVE — the machine learning algorithm for detection of pre-cancer — there is no need for a scrape or a lab and a woman is able to receive a result at the point of care rather than waiting several weeks or months for a result."

Yael Misrahi

4. Upgrading disposable batteries

How batteries work has remained relatively unchanged for decades. BlueThink — without altering the underlying chemistry — have developed a way of making a common type of battery safer and more cost-effective.

BlueThink battery

BlueThink's battery is compact, simply constructed, flexible, and safe.

Manufacturers now widely use button batteries in medical devices, as BlueThink's Javier Eduardo Nadal explained to MNT:

"Medical devices are now smarter and more user-friendly than ever before."

"This growing trend relies on good design and the use of technologies like LEDs and screens to improve the user experience, as well as connectivity to provide patients, doctors, and healthcare systems with valuable data."

"All these innovative devices have one thing in common: They need energy."

Button batteries are not without their problems; if a person leaves them on a shelf for a long time, they lose their charge. If they are incinerated — for instance, those of contaminated disposable medical equipment — they explode.

They are also harmful to the environment and a significant hazard for children if swallowed.

According to BlueThink, they have found a way to mitigate all of the above. Using standard battery technology but with a twist, they have created a flexible battery that a child could safely swallow, that does not explode when incinerated, and that keeps its charge when left on a shelf.

Importantly, it is also low-cost and producible in large quantities.

Nadal told MNT that "[a] small amount of energy can make a big difference in a medical device, but it must not compromise user experience, safety, or sustainability."

5. Robots vs. loneliness

Loneliness is a real, increasing issue in the U.S. and globally. In fact, many healthcare professionals now recognize loneliness as a risk factor for a number of medical conditions, including cardiovascular disease.

Genie Connect close up

Genie Connect promises to combat loneliness.

For this reason, we need to address loneliness with urgency.

Service Robotics Limited have recently created an innovative solution that aims to bridge this gap.

Genie Connect is a friendly looking miniature robot. The designers described it as "a companion robot service that uses a friendly, intuitive, voice-enabled robot to offer connectivity and support [...] older adults."

It can carry out commands in a similar way to other popular virtual assistants, but it has a range of bespoke, customizable features.

Genie Connect can have a conversation and set up video chats with healthcare professionals and family members. Service Robotics Limited designed it to help stimulate and engage the user's mind. It also reminds the user when to take medication and attend appointments.

There is a common concern that robots will take away the jobs of humans; in this case, Genie Connect fills a gap that humans currently leave open.

6. Breathe more easily?

Perhaps the most unusual device we saw at Future Healthcare 2019 was called SoeMac. According to its creators, "SoeMac alternative therapy creates energized oxygen, which your body can safely use to help restore itself at night while you sleep."

SoeMac is a small, rectangular device that gently whirrs. A user simply switches it on and leaves it by their bed at night. According to the designers, it helps us breathe more easily and sleep better.

They say that "it works by drawing air inside and producing a bio-usable form of energized oxygen, known as Singlet Oxygen Energy, or SOE."

"This can help your body to carry out essential restorative work while you sleep at night, boosting the effectiveness of your nighttime detoxification and bodily repair functions."

It is crucial to note that so far, no clinical trials back up these claims. However, SoeMac's creators are planning studies in the near future. In particular, they hope that it might give relief to people with chronic obstructive pulmonary disease.

Overall, Future Healthcare 2019 was a thoroughly interesting event. It is always exciting being party to the cutting edge of medical innovation.

Health Sector (Hindustan: 20190326)

http://epaper.livehindustan.com/imageview_5954_71150708_4_1_26-03-2019_i_17.pagezoomsinwindows.php

किसान और स्वास्थ्य क्षेत्र के लिए होंगे अहम ऐलान

रणनीति

नई दिल्ली | पंकज कुमार पाण्डेय

मतदाताओं को लुभाने के लिए न्यूनतम आय गारंटी कांग्रेस के घोषणा पत्र में अकेला हथियार नहीं होगा। कांग्रेस किसानों, सबको स्वास्थ्य मुहैया कराने व युवाओं को अवसर उपलब्ध कराने से जुड़े कुछ और अहम ऐलान घोषणा पत्र में कर सकती है। कांग्रेस कार्यसमिति की बैठक में घोषणा पत्र को आखिरी रूप देने के लिए कई बिंदुओं पर चर्चा की गई है।

फिलहाल न्यूनतम आय गारंटी को कांग्रेस मास्टर स्ट्रोक मानकर चल रही है। इसे खूब जोर शोर से प्रचारित करने की योजना बनाई गई है। लोकसभा चुनाव के लिए कांग्रेस के घोषणा पत्र में राज्यों की ध्वनि भी नजर आएंगी। राज्यों की परिस्थिति के आधार पर केंद्रीय योजनाओं को लागू करने का खाका कांग्रेस अपने घोषणापत्र में पेश करेगी। वहीं, कांग्रेस कार्यसमिति की बैठक में न्यूनतम आय गारंटी योजना और महिलाओं से जुड़े मुद्दों पर कांग्रेस महासचिव प्रियंका गांधी वाड़ा ने भी अपने सुझाव रखे।

व्यापक विचार विमर्श से बनी रूपरेखा : घोषणा पत्र तैयार करने के लिए पार्टी ने हर राज्य में घोषणा पत्र के



नई दिल्ली में सोमवार को कांग्रेस कार्यसमिति की बैठक में पार्टी महासचिव प्रियंका गांधी वाड़ा, कुमारी सैलजा, मुकुल वासनिक और अविनाश पांडेय। • संजीव वर्मा

कई ऐलान मिलकर बनेंगे गेमचेंजर

न्यूनतम आय गारंटी के लिए कांग्रेस ने पूरे देश में डेटा का रिसर्च विंग के जरिए व्यापक अध्ययन कराया है। पार्टी का मानना है कि इसके जरिए पार्टी देश के सभी जातिगत समीकरणों को ध्वस्त कर सकती है। पार्टी सूत्रों ने कहा कि गरीबों को न्यूनतम आय, हर गरीब को स्वास्थ्य गारंटी, युवाओं को रोजगार के अवसर व किसानों के लिए सरल ऋण योजना या सीमित कर्जमाफी जैसे कदम मिलकर गेमचेंजर साबित हो सकते हैं। इन सभी सुझावों पर पार्टी ने मंथन किया है। आयुष्मान योजना की समीक्षा करने, महिलाओं को संसद व विधानसभाओं में 33 फीसदी आरक्षण का फिर से वादा, और नौकरियों में महिलाओं को रियायत देने जैसे कदम भी पार्टी के एजेंडा में हो सकते हैं।

सुझाव के लिए अलग अलग टीम भेजी थी। पिछले साल अक्टूबर से ही इसकी कवायद शुरू कर दी गई थी। 22 सदस्यीय समिति ने 174 से ज्यादा

विचार विमर्श से जुड़ी बैठकें की। करीब 121 बार जनपरामर्श किया गया। अलग अलग क्षेत्रों के 50 से ज्यादा विशेषज्ञों के सुझाव शामिल किए गए हैं।

मीठे पेय का सेवन बन सकता है कैंसर की वजह

नई दिल्ली | हिटी

भोजन में अक्सर मीठे की मात्रा को नियंत्रित करना लोगों के लिए मुश्किल होता है। मगर एक हालिया अध्ययन के मुताबिक ज्यादा मीठे पेय पदार्थों का सेवन आंतों के कैंसर की वजह बन सकता है। कैंसर की वृद्धि में शुगर का प्रत्यक्ष रूप से क्या प्रभाव होता है, वैज्ञानिकों ने इसका अध्ययन किया।

अमेरिका में बायलर कॉलेज ऑफ मेडिसिन और वेल कॉर्नेल मेडिसिन के शोधकर्ताओं ने चूहों पर अध्ययन किया।

अध्ययन

- मीठे पेय पदार्थों के सेवन से आंत के कैंसर का खतरा सबसे ज्यादा
- शर्करा की मात्रा शरीर में बढ़ने से ट्यूमर तेजी से पनपते हैं

बायलर में असिस्टेंट प्रोफेसर जिहय यू के मुताबिक अवलोकन संबंधी अध्ययनों की बढ़ती संख्या ने शुगरयुक्त पेय पदार्थों, मोटापे और कोलोरेक्टल कैंसर के जोखिम के बीच संबंध के बारे में जागरूकता बढ़ा दी है।