



INDIAN COUNCIL OF MEDICAL RESEARCH

Department of Health Research – Ministry of Health & Family Welfare
Government of India

Media report (5 January to 18 January)
(Health News)

(Syed Adil Shamim Andrabi)
Information Interface Officer

Kindness can help heart patients recover from emotional trauma

January 5, 2019/Hindustan Times

An egg a day may keep diabetes away

January 5, 2019/Hindustan Times

Botox jabs effective, safe in reducing chronic migraine

January 6, 2019/Hindustan Times

Spirulina, the superfood which can relax your arteries, lower blood pressure

January 7, 2019/Hindustan Times

New potential breast cancer drug identified

December 8, 2019/The Asian Age

In 2018, Pune recorded highest number of H1N1 deaths in Maharashtra: data

January 8, 2019/Indian Express

Biodegradable sensor can monitor blood flow in arteries

January 9, 2019/The Tribune

2 drinks daily may up irregular heartbeat risk

January 10, 2019/The Tribune

Decreased deep sleep may signal Alzheimer's disease: Study

January 10, 2019 The Tribune

Excess belly fat may shrink your brain: Study

January 11, 2019/Hindustan Times

Decreased deep sleep may signal Alzheimer's disease: Study

January 12, 2019/Hindustan Times

Personal income may increase risk of heart disease and death: Study

January 14, 2019/The Indian Express

Reducing sedentary time may cut early death risk: Study

January 15, 2019/The Indian Express

Gluten Intolerance: The rising problem of wheat-related disorders

January 16, 2019/The Indian Express

B-group vitamins beneficial for psychotic patients

January 17, 2019/Hindustan Times

Study finds stroke drug could prevent Alzheimer's disease

January 17, 2019/Hindustan Times

Cut red meat, sugar by 50%: Lancet's diet plan for the world

January 17, 2019/The Hindu

Swapping 30 mins of sitting around with physical activity cut the risk of early death

January 18, 2019/Hindustan Times

Kindness can help heart patients recover from emotional trauma

January 5, 2019/Hindustan Times

Heart attack patients can suffer substantial emotional trauma after treatment, and showing kindness may help them find their way back to emotional well-being, a study has found. The emotional whiplash can range from phobia about moving in case their heart rate rises, to difficulty accepting a new identity as someone with a serious health condition, according to a study published in the journal *Qualitative Research in Sport, Exercise and Health*. The study found emotional trauma following a heart attack was more common in men who saw themselves as alpha males who, after becoming a heart patient, saw themselves as the runt in the litter, weak and likely to be ‘picked off’ by life and other people. The research by Samantha Meredith, a PhD student University of Portsmouth in the UK, found cardiac rehabilitation played a huge role in helping people find their way back to emotional wellbeing. The study examines cardiac patients navigating shock and grief, including depression, feelings of loss of control, and a disruption to their understanding of who they thought they were.

An egg a day may keep diabetes away

January 5, 2019/Hindustan Times

Eating an egg daily can have a beneficial effect on the blood metabolite profile that is related to a lower risk of Type-2 diabetes, a new study shows. The findings showed that the blood samples of men who ate more eggs included certain lipid molecules that positively correlated with the blood profile of men who remained free of Type-2 diabetes. “The study explored potential compounds that could explain this association using non-targeted metabolomics, a technique that enables a broad profiling of chemicals in a sample,” said lead author Stefania Noerman from the University of Eastern Finland. Eggs remain one of the most controversial food items. High intake of eggs has traditionally been discouraged, mainly due to their high cholesterol content. However, eggs are also a rich source of many bioactive compounds that can have beneficial effects on health. This means that the health effects of consuming eggs are difficult to determine based solely on their cholesterol content, the researchers said.

Botox jabs effective, safe in reducing chronic migraine

January 6, 2019/Hindustan Times

Besides removing those wrinkles and enhancing your beauty, botox has also been proven to be effective and safe in treating chronic migraine that affects your daily activities, says a new study. Chronic migraine is defined as at least 15 headache attacks per month for more than three months, with migraine symptoms on at least eight days every month. The study showed that botox or botulinum toxin injections is superior to inactive placebo for preventive treatment of migraine and that it significantly reduced the frequency of chronic migraine attacks.

Botox prevents migraine headaches before they start, but takes time to work. It is injected around the pain fibres involved in the production of headaches. “Botulinum toxin is a safe and well-tolerated treatment that should be proposed to

patients with migraine,” said the researchers from the University Hospital Rangueil In France. For the study, the team included nearly 3,650 patients, among which 1,550 had chronic migraine. The remaining patients had less-frequent episodic migraine headaches.



Spirulina, the superfood which can relax your arteries, lower blood pressure

January 7, 2019/Hindustan Times

Suffering from hypertension? Take heart, Italian researchers have identified Spirulina, a superfood made from algae, that could help to reduce blood pressure. The superfood, described as the “most complete food source in the world”, contains a specific protein which was found to relax arteries in the laboratory and in animals, the Daily Mail reported. Spirulina, scientifically called arthrospira platensis, is technically a type of bacteria. Researchers at the Mediterranean Neurological Institute in Pozzilli, Italy, isolated certain molecules from the spirulina to test its health benefits. They simulated the effects of digesting spirulina on isolated arteries and animals in the lab. “We reproduced what happens in the human gut after ingesting the substance,” lead author Albino Carrizzo was quoted as saying. “This way we have been able to isolate the peptides that would be absorbed by our body,” he added. The study, detailed in the journal Hypertension, also discovered for the first time a molecule in spirulina, called SP6, which lowered the blood pressure of animals. When put into the body SP6 is thought to stimulate a process in the body which releases nitric oxide. The spirulina triggered relaxation of the artery, a process called vasodilatory action, which can help lower blood pressure by increasing the amount of blood pumped in one motion.

New potential breast cancer drug identified

December 8, 2019/The Asian Age

Scientists, including an Indian-American researcher, have identified a molecule that can help treat breast cancer, giving hope to patients who have become resistant to traditional therapies. The first-in-class molecule shuts down oestrogen-sensitive breast cancer in a new way, researchers said. First-in-class drugs are those that work by a unique mechanism - in this case a molecule that targets a protein on the oestrogen receptor of tumour cells. The potential drug offers hope for patients whose breast cancer has become resistant to traditional therapies.

"This is a fundamentally different, new class of agents for oestrogen-receptor-positive breast cancer," said Ganesh Raj, professor at the University of Texas Southwestern (UT Southwestern) Simmons Cancer Center. "Its unique mechanism of action overcomes the limitations of current therapies," Raj said.

All breast cancers are tested to determine if they require oestrogen to grow and about 80 per cent are found to be oestrogen-sensitive, researchers said.

In 2018, Pune recorded highest number of H1N1 deaths in Maharashtra: data

January 8, 2019/Indian Express

Maharashtra had the highest number of cases of H1N1 virus (swine flu) and deaths last year followed by Rajasthan and Gujarat in the country. According to the state health officials, there were 2,594 cases of H1N1 virus in 2018 and 462 deaths. Of these, the highest number of deaths was in Pune. Across the country there were a total of 13,447 cases of H1N1 virus and 969 deaths according to the latest update of the National Centre for Disease Control (NCDC). Last year was relatively quiet

according to experts across various states. However Karnataka, Kerala and Andhra Pradesh had a fair share of H1N1 virus cases. There were 1,553 H1N1 virus cases in Karnataka with 59 deaths, 2,053 cases in Gujarat with 88 deaths and 738 cases and 40 deaths last year in Kerala according to NCDC data. A review by health officials in Maharashtra, which had the highest number of deaths, shows that the age group of 21 to 50 was among the most affected.



Biodegradable sensor can monitor blood flow in arteries

January 9, 2019/The Tribune

Stanford scientists have developed a biodegradable, battery-free sensor that can monitor the flow of blood through an artery, helping doctors assess the success of blood vessel surgery. The device does not need to be removed and can warn a patient's doctor if there is a blockage, researchers said.

"Measurement of blood flow is critical in many medical specialties, so a wireless biodegradable sensor could impact multiple fields including vascular, transplant, reconstructive and cardiac surgery," said Paige Fox, assistant professor at Stanford University in the US. "As we attempt to care for patients throughout the Bay Area, Central Valley, California and beyond, this is a technology that will allow us to extend our care without requiring face-to-face visits or tests," said Fox.

Monitoring the success of surgery on blood vessels is challenging as the first sign of trouble often comes too late. By that time, the patient often needs additional surgery that carries risks similar to the original procedure. This new sensor could let doctors keep tabs on a healing vessel from afar, creating opportunities for earlier interventions.

2 drinks daily may up irregular heartbeat risk

January 10, 2019/The Tribune

Even moderate alcohol consumption, described as intake of two drinks daily or 14 per week, could increase the risk of irregular heart rhythm condition, warn researchers. The team from the Alfred Hospital in Melbourne, Australia, found that regular moderate alcohol consumption (an average of 14 glasses per week) results in more electrical evidence of scarring and impairment in electrical signalling compared with non-drinkers and light drinkers. Alcohol consumption is therefore an important modifiable risk factor for atrial fibrillation—an abnormal heart rhythm characterised by rapid and irregular beating of atria—upper chamber of the heart, the researchers said.

"Regular moderate alcohol consumption, but not mild consumption, is an important modifiable risk factor for atrial fibrillation associated with lower atrial voltage and conduction slowing," said lead investigator Peter Kistler, Professor from the Heart Centre at Alfred Hospital.

Decreased deep sleep may signal Alzheimer's disease: Study

January 10, 2019 The Tribune

Older people who get less deep sleep have higher levels of the brain protein tau, a sign of cognitive decline and Alzheimer's disease, according to a study.

Slow-wave sleep is the deep sleep people need to consolidate memories and wake up feeling refreshed, said researchers at the Washington University School of Medicine in the US. The findings, published in the journal Science Translational Medicine, suggest that poor-quality sleep in later life could be a red flag for

deteriorating brain health. "What's interesting is that we saw this inverse relationship between decreased slow-wave sleep and more tau protein in people who were either cognitively normal or very mildly impaired, meaning that reduced slow-wave activity may be a marker for the transition between normal and impaired," said Brendan Lucey, an assistant professor at the Washington University.

"Measuring how people sleep may be a noninvasive way to screen for Alzheimer's disease before or just as people begin to develop problems with memory and thinking," Lucey said.

Excess belly fat may shrink your brain: Study

January 11, 2019/Hindustan Times

Excess belly fat can probably shrink the grey matter volume in your brain, a new study finds. Grey matter contains most of the brain's 100 billion nerve cells, while the white matter is filled with nerve fibres that connect the brain regions.

A study of 9,652 middle-aged people, conducted at the Loughborough University, measured body mass index (BMI) and waist-to-hip ratio. It was found that nearly one in five of the participants were found to be obese. The findings of the study appeared in the Journal of Neurology. Researchers also used an MRI to scan participants' brain volume. The researchers factored in age, physical activity, smoking and high blood pressure, all of which might lead to reduced volume.

The study found that 1,291 people who had a BMI of 30 or higher and a high waist-to-hip ratio had the lowest average grey matter volume, at 786 cubic centimetres; 514 people with a BMI of 30 or higher but without central obesity had an average grey matter volume of 793 cubic centimetres. Meanwhile, 3,025 people with overall health scores had an average grey matter volume of 798 cubic centimetres.

Decreased deep sleep may signal Alzheimer's disease: Study

January 12, 2019/Hindustan Times

Older people who get less deep sleep have higher levels of the brain protein tau, a sign of cognitive decline and Alzheimer's disease, according to a study.

Slow-wave sleep is the deep sleep people need to consolidate memories and wake up feeling refreshed, said researchers at the Washington University School of Medicine in the US. The findings, published in the journal Science Translational Medicine, suggest that poor-quality sleep in later life could be a red flag for deteriorating brain health.

"What's interesting is that we saw this inverse relationship between decreased slow-wave sleep and more tau protein in people who were either cognitively normal or very mildly impaired, meaning that reduced slow-wave activity may be a marker for the transition between normal and impaired," said Brendan Lucey, an assistant professor at the Washington University.

"Measuring how people sleep may be a non-invasive way to screen for Alzheimer's disease before or just as people begin to develop problems with memory and thinking," Lucey said. The brain changes that lead to Alzheimer's, a disease that affects an estimated 5.7 million Americans, start slowly and silently.

Personal income may increase risk of heart disease and death: Study

January 14, 2019/The Indian Express

While, having an unstable income can easily turn into a stressor, falling into the volatility of personal income could translate into the risk of having serious heart disease or even cause death, according to a study by The Coronary Artery Risk Development in Young Adults (CARDIA) which started back in 1990.

With an aim to find out whether there was a link between income fluctuations and risk of cardiovascular events as well as death, the ongoing study has been tracking the health of young people for nearly three decades now.

Per the Medical News Daily, “they first studied income levels taken from five assessments in 1990–2005. They defined income volatility as a percentage change from one income figure to the next. They also looked at income drop, or an income decrease of 25 percent or more from the previous assessment figure. They then tracked the number of people who experienced cardiovascular events — both fatal and non-fatal — or died of any cause in 2005 – 2015.”

Reducing sedentary time may cut early death risk: Study

January 15, 2019/The Indian Express

Swapping just 30 minutes of sitting time with physical activity of any intensity or amount, may help reduce the risk of early death, a study claims. The study highlights the importance of movement regardless of its intensity or amount of time spent moving for better health.

“Our findings underscore an important public health message that physical activity of any intensity provides health benefits,” said Keith Diaz, assistant professor at Columbia University in the US.

About one in four adults spends more than eight hours a day sitting, researchers said. The study included 7,999 individuals, age 45 and older, who took part in an investigation of racial and regional disparities in stroke between 2009 and 2013. The individuals wore activity monitors for at least four days to record the amount and intensity of physical activity they engaged in while awake.

“If you have a job or lifestyle that involves a lot of sitting, you can lower your risk of early death by moving more often, for as long as you want and as your ability allows — whether that means taking an hour-long high-intensity spin class or choosing lower-intensity activities, like walking,” Diaz said. While the study estimated the degree to which the risk of dying from any cause could be cut by swapping sitting for movement, it did not look at specific health-related outcomes.

“In our next study, we plan to look at the risk of specific cardiovascular outcomes, such as heart attack, heart failure, and cardiovascular-related deaths, associated with physical activity versus sedentary behaviour,” Diaz said.

Gluten Intolerance: The rising problem of wheat-related disorders

January 16, 2019/The Indian Express



Wheat has been listed among the top eight allergens in the world and adverse reactions to this cereal grain can be in the form of an allergy, skin rashes, bloating, digestive disorders or other intolerances. To create awareness about early diagnosis and management of the disease of which Indians generally “have little or no knowledge”, the International Symposium on Wheat related Disorders (ISWD) 2019 was organised in the Capital by the Celiac Society of India (CSI) from January 10-13. Gluten allergy, also known as celiac disease, is an autoimmune disease that occurs because of ingestion of a protein, called gluten, which is present in the cereals – wheat and barley. In these patients, the gluten protein is not digested completely and that leads to damage of the small intestine, where food is absorbed. With the damage of the small intestine, the food is not absorbed and thus, these patients fail to grow in height and weight, develop chronic diarrhea, anemia (low hemoglobin), and weakness of bones.

According to Prof. (Dr) Anupam Sibal, Apollo Hospitals Group, “One should not go on a completely gluten-free diet just on the basis of a blood test.” On a similar note, Ms. Khosla adds, “It is good to be on a diet for a few months and then reintroduce it. Once you are back in the diet, then check if the same symptoms are there. If it is still there, then you are wheat sensitive. When the gut breaks down, supplements are given accordingly.”

Dr. Sibal also pointed out that celiac disease may depend on a location. “Celiac disease is a common problem in North and East India but not so much in South India. According to a survey conducted by the Indian Council of Medical Research, in Haryana the prevalence of the disease is 8 people per thousand, in Assam, it is 4 per thousand and in Tamil Nadu, it is only 0.1 per thousand. So, we have a lot of variation.”

B-group vitamins beneficial for psychotic patients

January 17, 2019/Hindustan Times

Intake of B-group vitamin supplements may be beneficial for maintaining concentration skills among people experiencing a first episode of psychosis - a precursor to developing schizophrenia, finds a study. The findings showed that patients with psychosis who took vitamins B12, B6, and folic acid (vitamin B9) for over 12 weeks saw improvement in their cognitive functioning such as memory, attention, language and learning abilities. “This indicates the B-vitamins could have a neuroprotective effect,” said Kelly Allott from Orygen - an Australia-based research centre for youth mental health. They may also protect these skills from declining, Allott said. The study stems from previous studies in people with schizophrenia which revealed that increased intake of vitamins B12, B6, and folic acid (vitamin B9) could decrease patients’ levels of an amino acid called homocysteine and improve their symptoms. Interestingly, participants who had abnormally high homocysteine levels at baseline were most responsive to the B-vitamin supplements, in terms of improvement in attention.

“The results support a more personalised approach to vitamin supplementation in first episode of psychosis, suggesting those with elevated homocysteine are likely to benefit most,” Allott said.

[Study finds stroke drug could prevent Alzheimer's disease](#)

January 17, 2019/Hindustan Times



Researchers have found that a drug which could treat stroke victims may also prevent Alzheimer's disease. The University of Southern California findings have been published in the Journal of Experimental Medicine. The study shows that the genetically engineered protein 3K3A-APC protects the brains of mice with Alzheimer's-like symptoms, reducing the buildup of toxic peptides and preventing memory loss. 3K3A-APC is a genetically modified version of a human blood protein called activated protein C, which reduces inflammation and protects both neurons and the cells that line the walls of blood vessels from death and degeneration.

3K3A-APC has beneficial effects in various mouse models of disease, including traumatic brain injury and multiple sclerosis. It is currently being developed to treat stroke in humans, where it has been shown to be safe, well tolerated, and capable of reducing intracerebral bleeding. Zlokovic and colleagues found that 3K3A-APC protects the brain by preventing nerve cells from producing an enzyme called BACE1 that is required to produce amyloid- β . Several different inhibitors of BACE1 have been tested in clinical trials for Alzheimer's disease, but the new study suggests that using 3K3A-APC to block the production of BACE1 could be an alternative approach, particularly at early stages of the disease when amyloid- β has yet to accumulate to levels capable of permanently damaging the brain.

"Our present data support the idea that 3K3A-APC holds potential as an effective anti-amyloid- β therapy for early stage Alzheimer's disease in humans," Zlokovic said.

[Cut red meat, sugar by 50%: Lancet's diet plan for the world](#)

January 17, 2019/The Hindu

With the ideal diet, your life would be less sweet but your lifespan would be longer. Cut consumption of sugar and red meat by 50%, and increase the intake of fruits, vegetables, and nuts — that is the top recommendation of a worldwide diet plan according to a special report released on Thursday by the journal Lancet. Such a diet would not only be healthier but also more environment-friendly.

The EAT-Lancet Commission, an independent non-profit consisting of 19 scientists and 18 co-authors from 16 countries, was tasked with developing global scientific targets for a healthy diet and sustainable food production. The experts on this panel from India included Srinath Reddy of the Public Health Foundation of India and Sunita Narain of the Centre for Science and Environment. The Commission recommended that the average adult, whose daily requirement is about 2,500 calories, must strive to source around 800 calories from whole grain (rice, wheat or corn), 204 calories from fruits and vegetables, and not more than 30 calories from red meat (beef, lamb or pork). It also suggested that the ideal diet should have no "added sugar" or "added fat". Unhealthy diets are the leading cause of ill-health worldwide, and following this healthy diet could avoid approximately 11 million premature deaths a year, the report said.

Dramatic change

"The world's diets must change dramatically. More than 800 million people have insufficient food, while many more consume an unhealthy diet that contributes to premature death and disease," said co-lead Commissioner Dr. Walter Willett of Harvard University. "To be healthy, diets must have an appropriate calorie intake

and consist of a variety of plant-based foods, low amounts of animal-based foods, unsaturated rather than saturated fats, and few refined grains, highly processed foods, and added sugars.”



Swapping 30 mins of sitting around with physical activity cut the risk of early death

January 18, 2019/Hindustan Times

Do you like sitting around? A new study now finds that swapping a half hour of sitting around with physical activity of any intensity or duration cut the risk of early death by as much as 35 per cent in older adults. Notably, the findings stress on the importance of movement, regardless of its intensity or amount of time spent moving, for a healthier life. The study was published online in the American Journal of Epidemiology. Talking about it, Keith Diaz, PhD, assistant professor of behavioural medicine at Columbia University Vagelos College of Physicians and Surgeons and lead author of the study said, “Our findings underscore an important public health message that physical activity of any intensity provides health benefits.” The study found that about one in four adults spends more than eight hours a day sitting. Swapping the same amount of sitting for moderate to vigorous activity would be twice as effective, cutting the risk of early death by 35 per cent. The researchers also found that short bursts of activity -- of just a minute or two -- provided a health benefit. However, while the study estimated the degree to which the risk of dying from any cause could be cut by swapping sitting for movement, it did not look at specific health-related outcomes. Speaking about it, Diaz said, “In our next study, we plan to look at the risk of specific cardiovascular outcomes, such as heart attack, heart failure, and cardiovascular-related deaths, associated with physical activity versus sedentary behaviour.”

With regards,

Syed Adil Shamim Andrabi
Information Interface Officer/PRO
Indian Council of Medical Research-
Department of Health Research
Ministry of Health and Family Welfare
proicmr@gmail.com, syed.adil@icmr.gov.in
Ext. 286, Phone. 26589130