



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY  
Tuesday 20190709

## Generic drugs

### Taking a myopic view of foreign-made generic drugs (The Hindu: 20190709)

<https://www.thehindu.com/opinion/op-ed/taking-a-myopic-view-of-foreign-made-generic-drugs/article28322909.ece>



The U.S. is using the Ranbaxy experience to create a bogey

Allegations of widespread fraud concerning generic drugs manufactured overseas, especially in India, were recently highlighted in the U.S. Much focus was on the contamination found in one drug made by Ranbaxy. I do not wish to support Ranbaxy's deplorable behaviour. Nor do I wish to belittle the importance of the ongoing efforts to fix India's drug regulatory framework. The point here is that this focus has been deployed to undermine foreign generics.

For instance, the Ranbaxy saga unfolded 14 years ago. Since then, several pharmaceutical companies, both foreign and local, generic and innovative, have been implicated in similar or worse behaviour. Notable examples include those of Martin Shkreli's Turing Pharmaceuticals, which hiked the price of a drug to 5,000%, and Purdue Pharmaceuticals, a company currently

implicated for causing the opioid crisis. The strategy of raising fears of ‘contaminated’ foreign generics has successfully prejudiced Americans against valid generic drugs, even though they have remained a viable option.

This frenzy about contamination of drugs is due partly to the expansion of the Food Safety Modernization Act (FSMA) to include global inspections. One objective in thus empowering the Food and Drug Administration (FDA) was to work with regulators of foreign countries and create a universal Current Good Manufacturing Practice (CGMP) system for drugs.

#### FDA’s regulatory overreach

Instead, the FDA has positioned itself as a ‘global regulator’. For example, in a recent statement, it mentioned that it inspects all brand-name and generic manufacturing facilities around the world based on information from whistleblowers or out of concern for drug safety. Arguably, this amounts to regulatory overreach as there is no international instrument standardising American CGMP practices as the global standard.

Further, under the FSMA, if a foreign facility refuses inspection, the FDA’s power is limited to refusing the food/drug entry into the U.S. America’s interest in good manufacturing practices to protect its citizens is commendable. Nevertheless, given Washington’s current zeal to propel exports, if India or China pass legislation to inspect U.S. food or drug manufacturing facilities, U.S. companies may not readily welcome the move.

#### A prejudiced dialogue

In 2018, out of the 4,676 human pharmaceutical sites inspections that the FDA conducted worldwide, 61% were of foreign-based facilities. Similarly, out of 1,365 human drug CGMP surveillance inspections conducted, 55% were conducted at facilities outside the U.S. The FDA’s publicising of its ‘global vigilante experience’ paints a picture of foreign-manufactured drugs as ‘defective’ or ‘contaminated’ while not fully acknowledging some of the regulatory failures within America. To provide a perspective, the ‘drug recall list’, a list of drugs deemed defective in spite of having cleared FDA regulatory approvals for the last 14 years, runs into over 149 pages. I cite this to merely highlight that a prejudiced dialogue that does not capture all perspectives can create imprecise impressions.

As such, when the FDA inspects production facilities, there are both smaller and bigger issues that will come up. There is no scale to determine whether the problems portrayed in the final report are simple ones, such as one tap not working, or more impactful ones, such as use of contaminated water. The absence of a proper scale provides a loophole, enabling the regulator to cherry-pick and treat all instances of non-compliance as egregious violations.

In addition, in the U.S., there is no proper legal definition of the oft-used term ‘contaminated drugs’. Section 351 of Title 21 of the U.S. Code defines ‘adulterated drugs’ and when a drug is deemed ‘adulterated’ for being contaminated, the regulator needs to specify whether the adulteration relates to the manner of preparation, the packaging standards or the manufacturing practices.

For India, the discussion in the U.S. is notable not only because it houses generic manufacturing facilities but also because India is a nation on the verge of breaking into the innovation market. Thus, it is time India took a more robust role to ensure public availability of facts on both the importance of generics and their limitations. The country needs to create strong voices and

partnerships that can highlight the benefits and pitfalls alike to create a robust space for innovation that can coexist with access to medication. After all, innovation and policy failings need not be an excuse to deny access to lifesaving medication to productive workforces.

## **Health expenditure (2012-2017)**

### **Haryana at bottom among 7 states: CAG (The Tribune: 20190709)**

<https://www.tribuneindia.com/news/nation/haryana-at-bottom-among-7-states-cag/799135.html>



Haryana ranks at the bottom in terms of average health expenditure (2012-2017) among seven states that the Comptroller and Auditor General (CAG) examined to assess the progress towards attaining sustainable development goals (SDGs) as regards “good health and well being”.

The average health expenditure was just 3.29 per cent of the Haryana budget, while it was 4.15 per cent in case of Maharashtra, 4.47 per cent in West Bengal, 4.74 per cent in Uttar Pradesh, 4.78 per cent in Chhattisgarh, 5.24 per cent in Kerala and 5.32 per cent in case of Assam.

The CAG report titled “Preparedness for the Implementation of Sustainable Development Goals” was tabled in Parliament today.

According to CAG, the National Health Policy prescribes increasing the health spending to more than 8 per cent of the state budget by 2020. The agency also noted that none of the states, except Assam, “had undertaken an assessment of financial requirements for medium to long term”. Haryana also fared badly on the health infrastructure front.

As per population norms, the state requires 501 primary health centres (PHCs), but only 366 such centres are functional there—a shortfall of 27 per cent.

In terms of doctors per PHC, Kerala (1.38) and Maharashtra (1.62) are better than Haryana (1.17), but Chhattisgarh (0.43) and Uttar Pradesh (0.61) face a considerable shortage. At a national conference of the chief secretaries and planning secretaries of the states (July 2016),

the NITI Aayog had asked every state to have its own vision, strategy and action plan. According to the report, strategy and action agenda are missing in Haryana. It said an SDG Coordination Centre has been set up in Haryana, but the assessment of requirement of physical resources is yet to be taken up. The 70th session of the UNGA, in September 2015, adopted the resolution “Transforming our World: the 2030 Agenda for Sustainable Development”, comprising 17 SDGs, including “no poverty”, “zero hunger” and “good health and well being”. India had committed to the 2030 agenda at the same meeting.

## **Eliminate malaria**

### **Tata Trusts searches for innovations to eliminate malaria (The Tribune: 20190709)**

<https://www.tribuneindia.com/news/health/tata-trusts-searches-for-innovations-to-eliminate-malaria/799035.html>

In line with India's target of eliminating malaria by 2030, the India Health Fund (IHF), an initiative by Tata Trusts on Monday announced its "Malaria Quest" -- a nationwide search for innovations towards eliminating the mosquito-borne disease.

One of the primary objectives of the initiative is to seek innovative technologies to strengthen surveillance to provide accurate estimates of disease burden and data-based decision making and risk-prediction.

Other objectives include developing innovative methods of vector control and personal protection for enhancing or complementing current strategies, improving logistical modalities and quality assurance of malaria consumables and consistently detecting and diagnosing cases of malaria, both in high and low endemic regions.

Applications from interested candidates will be accepted till September 2, 2019, IHF said in a statement.

Selected applications stand to receive wide support, including milestone-based funding support for validation, beta prototyping, feasibility studies and pilot introduction, as applicable, it added. —IANS

## **Genes**

### **Genes may play role in tooth decay, gum disease (The Tribune: 20190709)**

<https://www.tribuneindia.com/news/health/genes-may-play-role-in-tooth-decay-gum-disease/799028.html>

Hereditary traits and factors such as obesity, education and personality may play a role in tooth decay and gum disease, according to a study.

Tooth decay and periodontitis, also known as gum disease, are among the most common diseases around the world but unlike many other well-known diseases knowledge of how genes affect the risk of developing these dental diseases is still limited, said researchers at the University of Bristol in the UK.

Two people who eat the same things and take care of their mouth the same way may end up with a different number of cavities but researchers have not been able to explain why until now, they said.

"The study makes it clear that teeth are part of the body. Among other things, we can see that there seems to be a causal link between risk factors for cardiovascular disease and tooth decay," said Ingegerd Johansson, from the Institute of Odontology at Umea University, Sweden.

Previous research has suggested several genes may be involved but none had been confirmed. This is partly because complex diseases, such as tooth decay and periodontitis, require large studies to draw firm conclusions.

The study, published in the journal Nature Communications, combined data from nine international clinical studies with 62,000 participants together with data on self-reported dental health from the UK Biobank including 461,000 participants, making it the largest study of its kind.

The analysis involved scanning millions of strategic points in the genome to find genes with links to dental diseases.

The researchers were able to identify 47 new genes with connections to tooth decay. The study also confirmed a previously known immune-related gene is linked to periodontitis.

Among the genes that could be linked to tooth decay are those that help form teeth and the jawbone, those with protective functions in saliva and those which affect the bacteria found on the teeth.

The researchers also looked at the genetic link to cardiovascular and metabolic health factors such as smoking, obesity, education and personality to try and understand connections with dental health.

Using a technique called Mendelian randomisation, it appears there may be more than correlation but also a causal link between decay and some cardiovascular-metabolic risk factors.

"In the future, studies like this may pave the way to identifying people who are at particular risk of dental problems," said Simon Haworth, from Bristol Population Health Science Institute.

"However, no matter what genes people carry, good oral hygiene and diet are the most important things people can do to reduce the risk of tooth decay and gum disease," Haworth said. —PTI

## **Mental well-being**

### **Giving up alcohol may boost mental well-being (The Tribune: 20190709)**

<https://www.tribuneindia.com/news/health/giving-up-alcohol-may-boost-mental-well-being/799021.html>

Women who quit alcohol may have an improved health-related quality of life, especially their mental well-being, according to a study unveiled on Monday.

"More evidence suggests caution in recommending moderate drinking as part of a healthy diet," said Michael Ni from the University of Hong Kong (HKU).

The study, published in the Canadian Medical Association Journal, included 10,386 people from the FAMILY Cohort in Hong Kong who were nondrinkers or moderate drinkers between 2009 and 2013.

Moderate drinkers meant 14 drinks or less per week for men and seven drinks or less per week for women.

The researchers compared their findings with data from a representative survey of 31,079 people conducted by the National Institute on Alcohol Abuse and Alcoholism in the US.

The mean age of participants in the FAMILY Cohort was 49 years and 56 per cent were women.

About 64 per cent of men were nondrinkers (abstainers and former drinkers) and almost 88 per cent of women were nondrinkers.

Men and women who were lifetime abstainers had the highest level of mental well-being at the start of the study (baseline).

For women who were moderate drinkers and quit drinking, quitting was linked to a favourable change in mental well-being in both Chinese and American study populations.

These results were apparent after adjusting for sociodemographic characteristics, body mass index, smoking status, and other factors.

"Global alcohol consumption is expected to continue to increase unless effective strategies are employed," said Ni.

"Our findings suggest caution in recommendations that moderate drinking could improve health-related quality of life. Instead, quitting drinking may be associated with a more favourable change in mental well-being, approaching the level of lifetime abstainers," Ni said.

- PTI

## **Govt health care allocation**

### **Govt health care allocation far behind UN target: CAG (Hindustan Times: 20190709)**

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

There is still a long way to go before the target of public health expenditure is achieved and the central allocation for health for 2019-20 was far short of target. COMPTROLLER AND AUDITOR GENERAL REPORT

GOPAL BHARGAVA, LOP IN THE STATE ASSEMBLY, SAID THE CONGRESS WAS NOT SURE ABOUT THEIR STRENGTH IN THE HOUSE

:Government funding on health care is “a long way” before it can meet the development targets India has adopted as part of the United Nations’ Sustainable Development Goals (SDGs), the country’s apex auditor CAG has said, pulling up the Union government, the Niti Aayog and the governments of the states it surveyed.

The SDGs relate to a set of 17 objectives that include improving poverty, hunger and health by 2030 and the Comptroller and Auditor General (CAG) was reviewing work done in the context of health in several central ministries and Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Uttar Pradesh and West Bengal.

“There is still a long way to go before the target of public health expenditure is achieved and the central allocation for health for 2019-20 was far short of target. In states, health spending as a percentage of total states expenditure, ranged from 3.29 to 5.32% which shows that this need considerable augmentation,” CAG said in its report.

The report, tabled in Parliament on Monday, noted that public health expenditure as a percentage of Gross Domestic Product (GDP) had been increasing since 2015-16 but remained within a narrow band of 1.02-1.28 % of GDP.

“While it is recognised that projecting financial resources for achieving the Targets by 2030 is a challenging task, ministry of finance and state governments are yet to integrate SDG related financial resources in national budgeting for implementing SDGs,” it said.

According to the auditor, the problems went beyond allocation of funds.

“Data for certain health indicators were not regularly or uniformly available,” the report said.

The audit was taken up to ascertain the ‘Preparedness of the Government for the Implementation of SDGs’, covering aspects such as extent to which the 2030 agenda had been adapted. It selected ‘Goal 3 Good Health and Well-Being’ for a detailed examination.

The 2030 target is being coordinated by the NITI Aayog, which too came under the CAG’s criticism.

“A roadmap is yet to be aligned with defined milestones for SDG targets to be achieved in the year 2020, 2025 and 2030,” the report said in the context of the Aayog’s role as the coordinator.

A key action plan that the NITI Aayog was supposed to prepare was still not complete, the report noted.

“States are yet to prepare policy documents. Mapping of goals/targets undertaken by NITI Aayog and selected states is still ongoing.”

Efforts to raise public awareness about SDGs and initiatives in the selected states were not comprehensive, focused or sustained, the report said.

The auditor in its recommendations said a comprehensive charter and action plan with well-defined milestones for implementing SDGs should be formulated after due consultations.

It also suggested the use of Direct Benefit Transfers (DBT) should be expanded and strengthened to avoid leakages and to improve efficiency in usage of financial resources. BHOPAL: Madhya Pradesh chief minister Kamal Nath has asked all legislators supporting the Congress government in the state to be ready for a floor test in the assembly in the event the opposition Bharatiya Janata Party comes up with such a demand.

There is speculation that the BJP was planning to put the government on the mat in the monsoon session of the assembly beginning Monday. In May, it had demanded that the Kamal Nath government prove its majority on the floor of the House.

The Congress has 114 legislators in the state assembly and has support of six other legislators — one each from the Samajwadi Party and the Bahujan Samaj Party and four independents in the 230-member House. The opposition Bharatiya Janata Party has 108 MLAs.

“It is mandatory for all the Congress MLAs and other MLAs supporting the government to remain present in the assembly during the monsoon session. The opposition can come up with any demand [referring to floor test] and we should be ready for the floor test to pass the budget,” the CM said at a meeting of MLAs.

“The MLAs should keep their beliefs in the more than 130-year-old Congress party intact. BJP leaders will try to lure our members but we shouldn’t fall prey. We don’t need to be afraid of BJP’s design and false claim,” Nath added.

Confirming the BJP strategy, Gopal Bhargava, leader of the opposition in the state assembly, said the Congress was not sure about their strength in the House. “This session is going to be very interesting. We will raise all the issues related to the failure of the government in the House and will also go for a floor test. There is a possibility, they (the government) will be voted out in the House,” he said.

Surendra Singh, independent legislator from Burhanpur, said there is no threat to the government but the Congress should fulfill its promise of ministerial berth. Some of the Congress MLAs also expressed their disappointment over not getting cabinet berth. However, other Congress legislators said that there was no threat to the government. NEWDELHI: Former Union minister Karan Singh on Monday called for an urgent meeting of Congress’s highest decision-making body under former PM Manmohan Singh’s chairmanship to take “necessary decisions” in view of Rahul Gandhi’s resignation as the party chief.

Karan Singh, 88, said he is “aghast” at the disorientation into which the party has fallen since Gandhi’s resignation on May 25. “Instead of honouring his bold decision a month was wasted pleading him to take back his resignation which, as a man of honour and integrity, he should not have been pressurised to do,” he said in a statement. He said there is still no alternative structure in place.

Karan Singh said the longer the present uncertainty remains, the more Congress workers and voters will be demoralised. “The negative cycle must be reversed before it is too late,” he said.

He called for the urgent Congress Working Committee meeting to take decisions including appointment of an interim party president till the next organisational elections. He also suggested four working presidents and vicepresidents each for North, South, East and West zones. "This would enable the introduction of younger people into positions of authority," he said.

Karan Singh's remarks came a day after two young leaders Jyotiraditya Scindia and Milind Deora announced that they have resigned from their posts, taking moral responsibility for the Congress's Lok Sabha poll debacle.

The spate of resignations in solidarity with Gandhi has plunged the Congress into a deep leadership crisis.

Rahul Gandhi along with his mother, Sonia Gandhi, separately attended a training programme for the Congress Parliament's members at the party's 'war room' in Delhi. Congress leaders Rajeev Gowda and Jairam Ramesh and former Lok Sabha secretary general PDT Acharya held the programme.

Congress parliamentary chairperson Sonia Gandhi will also meet party's Lok Sabha members tomorrow as part of her weekly interaction.

## **Breast cancer**

### **Triple-negative breast cancer diagnosis report shows racial disparities (New Kerala: 20190709)**

<https://www.newkerala.com/news/read/171502/triple-negative-breast-cancer-diagnosis-report-shows-racial-disparities.html>

A recent study suggests that women's colour and age may elevate the risk of developing triple-negative breast cancers, which are often aggressive and do not respond to hormone therapy.

The study was published in the journal, 'Cancer.'

To conduct a larger study, Lia Scott along with her fellow researchers analyzed all breast cancer cases diagnosed during 2010-2014 from the United States Cancer Statistics database, a population-based surveillance system of cancer registries with data representing 99 per cent of the U.S. population.

The team of researchers identified 1,151,724 cases of breast cancer from 2010-2014, with triple-negative cases accounting for approximately 8.4 per cent of all cases. The researchers uncovered a significant burden of triple-negative breast cancer for women of colour, specifically non-Hispanic black women, and for younger women.

Compared with non-Hispanic white women, non-Hispanic black women and Hispanic women had 2.3-times and 1.2-times higher odds of being diagnosed with triple-negative breast cancer, respectively. More than 21 per cent of non-Hispanic black women were diagnosed with triple-negative breast cancer, compared with less than 11 per cent for all other types of breast cancer.

Women younger than 40 years of age had twice the odds of being diagnosed with triple-negative breast cancer than women aged 50-64 years. Also, among women who were diagnosed with breast cancer, those diagnosed at late stages were 69 per cent more likely to have triple-negative cancer than other types.

The authors noted that due to the aggressive nature of triple-negative breast cancer and the lack of therapeutic options, it is important to know which individuals face higher risk and what factors may influence this risk.

"With the advent and availability of more comprehensive cancer data, such as the United States Cancer Statistics database, it is important that we continue to explore disparities in order to better inform practice and policy around screenable cancers like breast cancer," said Dr Scott.

## **Microvascular disease**

### **Microvascular disease associated with higher risk of leg amputations (New Kerala: 20190709)**

<https://www.newkerala.com/news/read/171456/microvascular-disease-associated-with-higher-risk-of-leg-amputations.html>

Microvascular disease in any part of the body is independently linked to a higher risk of leg amputation, finds a study.

The study was published in the journal 'Circulation'.

"Our study suggests that microvascular disease in any part of the body, such as the eyes, kidneys or feet (neuropathy) may be linked to decreased blood vessel function in other parts of the body, putting patients at risk for potential lower-limb amputations," said Joshua A. Beckman, lead author of the study.

The study examined amputation risk among people with microvascular disease or peripheral artery disease (PAD) or those who had both microvascular disease and PAD.

Researchers used data from the Veterans Aging Cohort Study, which included more than 125,000 veterans who initially did not have amputations when the study began. Over an average of nine years, participants with

the microvascular disease had a 3.7-fold increased risk of lower limb amputation, and experienced 18 per cent of all amputations during the study;

PAD had a 13.9-fold increased risk of lower limb amputation and suffered 22 per cent of all amputations; microvascular disease and PAD had a 23-fold increase in the risk of lower limb amputation which accounted for 45 per cent of all amputations.

PAD is a narrowing of the arteries away from the heart and is typically found in the legs. It causes cramping, pain or fatigue in the leg muscles while walking or climbing stairs. If left untreated, PAD can lead to gangrene and the need for amputation.

In microvascular disease, tiny vessels that carry blood to muscles and other tissues throughout the body no longer function properly. While the disease is commonly diagnosed in the eyes (retinopathy) or in the kidney (nephropathy), the authors believe those are markers of microvascular dysfunction throughout the body.

"This study advances the idea that microvascular disease is a system-wide disorder rather than only affecting one part of the body," said Beckman.

"PAD (in the legs) has long been considered a sign that a patient likely also has narrowed arteries leading to the heart or brain. If a patient has PAD, they have a higher risk of other cardiovascular diseases, such as heart attacks and strokes," Beckman said.

## **Cooking oil**

### **The source of your cooking oil can impact your health (New Kerala: 20190709)**

<https://www.newkerala.com/news/read/171171/the-source-of-your-cooking-oil-can-impact-your-health.html>

With the rising incidences of obesity, diabetes, heart disease and hypertension, it is probably the cooking oil which got maximum attention from the health-conscious consumers.

From understanding the concept of good fats and the bad fats to learning about PUFA and MUFA composition, buyers today have come a long way in terms of picking healthy cooking oil. However, recent research indicates that to ensure really healthy cooking oil, one needs to be mindful of the quality of air, along with water and soil, in the region where the oilseeds are grown and processed.

Along with the healthy fats, to reap the benefits of cooking oil, you also need to ensure that the oilseeds are grown in a healthy environment. Rainwater for irrigation and no air pollution- these are the requisites that make your cooking oil really natural and healthy.

According to The United Nations (UNECE), 'food production is threatened by air pollution'. UNECE states that nitrogen oxides and volatile organic compounds are of particular concern as these compounds react and penetrate into the plant structure.

"Thanks to rising awareness, people have started choosing food items that are chemical Free and are grown Naturally. It is Time to recognise environmental pollution as an important risk factor for the quality of the crops and our health. Studies indicate that along with water and soil pollution, air pollution is also significantly affecting crop production and quality. Therefore, while selecting our food we should pay attention to their source," said Adhiraj Sarin, Chairman, Wagga Wagga Oil.

According to an article published in Nature Climate Change, food production is highly vulnerable to both climate change and air pollution with implications for global food security.

"Research indicates that the extent of damage done by air pollution varies from plant to plant. Unfortunately, oilseeds fall into the high-risk category, making it even more important for the consumers to ensure that the source of their cooking oil is pollution free. This is why we make our cooking oil from the oilseeds grown and processed in Australia, where the soil, water and air are in still in their purest form, free from pollution and any chemical contamination, Just as Nature Intended," said Dhruv Kakar, Marketing Manager, Wagga Wagga Oil.

Making the cooking oil truly healthy and fresh, Wagga Wagga goes an extra mile, ensuring that complete processing from the seed to oil is accomplished within 24 hours. With their policy of adhering to non-GM seeds, Wagga Wagga offers one of the healthiest and wholesome cooking oil to the Indian consumers.

So next time you plan your grocery shopping keep in mind that you now have a really healthy and natural option.

This story is provided by BusinessWire India. ANI will not be responsible in any way for the content of this article.

## **Consuming milk, dairy products**

### **Consuming milk, dairy products prevents individuals from chronic diseases (New Kerala: 20190709)**

<https://www.newkerala.com/news/read/169693/consuming-milk-dairy-products-prevents-individuals-from-chronic-diseases.html>

Remember how parents always used to count numerous benefits of drinking milk and asked you to have a glass of it! Well, a new study has shed light on the fact that consuming an adequate amount of milk and other dairy products at different stages of life prevents an individual from chronic diseases.

For example, there is a positive link between the moderate intake of milk during pregnancy and birth weight, length, and bone mineral content during childhood. In addition, a daily intake of milk and dairy products in elderly people may reduce the risk of frailty and sarcopenia.

The findings of the review were published in the journal 'Advances in Nutrition'.

The following study reviewed global scientific literature on the role of dairy products in health and in the prevention of chronic diseases including cardiovascular, metabolic syndrome, colon or bladder cancer, and type 2 diabetes.

It also examined the effects of milk and dairy products on the growth, bone mineral density, generation of muscle mass, and during pregnancy or breastfeeding.

Milk and dairy products not only contain multiple nutrients but also contribute to meeting the nutritional requirement for protein, calcium, magnesium, phosphorus, potassium, zinc, selenium, vitamin A, riboflavin, vitamin B12, and pantothenic acid.

In the following study, researchers also found that a higher intake of dairy products depicted an association with decreased vertebral fracture risk.

However, in the analysis of the differences between high vs. low consumption of dairy products, no association was identified between dairy product consumption and increased risk of mortality.

The total intake of low-fat dairy products was associated with a reduced risk of metabolic syndrome, supporting the view that the consumption of dairy products does not increase the risk of cardiovascular disease and could have a slightly protective effect.

It has also been shown that moderate consumption of this food group is associated with a lower risk of colorectal cancer and bladder cancer, while no associations were found for prostate cancer.

To the contrary, the study suggested that the consumption of such products, especially low-fat dairy and yogurt, may be associated with a lower risk of type 2 diabetes.

Fortification of dairy products with phytosterols and omega-3 fatty acids appears to constitute a suitable strategy for improving cardiometabolic risk biomarkers.

## **Pesticide exposure**

### **Pesticide exposure linked to teen depression: Study (New Kerala: 20190709)**

<https://www.newkerala.com/news/read/169049/pesticide-exposure-linked-to-teen-depression-study.html>

Adolescents exposed to high levels of pesticides are at an increased risk of depression, recent findings suggest.

As part of the latest study, a team of researchers tracked the development of children living near agriculture in the Ecuadorian Andes since 2008.

Ecuador is the world's third-largest exporter of roses, with much of the flower production located near the homes of participants. Like many other agricultural crops, flowers are routinely sprayed with organophosphate insecticides, which are known to affect the human cholinergic system, a key system in the function of the brain and nervous system.

The researchers examined 529 adolescents between the ages of 11 and 17. The findings were published in the International Journal of Hygiene and Environmental Health.

To test exposure levels of children, the research team measured levels of the enzyme acetylcholinesterase (AChE) in the blood. Pesticides such as organophosphates and carbamates exert their toxicity by inhibiting AChE activity.

Past studies have shown that cholinesterase inhibition is linked to behaviors of anxiety and depression in mice, and a few existing studies in humans have also suggested such a link. However, pesticide exposure assessment in past studies had been only established by self-report of exposure and not using biological measures.

The results confirmed their hypothesis teens who had lower AChE activity, suggesting greater exposure to cholinesterase inhibitors, showed more symptoms of depression assessed using a standardised depression assessment tool. Notably, the association was stronger for girls (who comprised half of all participants) and for teens younger than 14 years.

According to the researchers, agricultural workers and people in these communities have long offered anecdotal reports of a rise in adolescent depression and suicidal tendencies.

Exercise improves anxiety, mood in elderly cancer patients undergoing chemotherapy

The benefits of exercise can't be undermined. Recently, scientists have found that exercise not only improves anxiety and mood problems in younger cancer patients but also in older adult patients who are undergoing chemotherapy.

The study was published in the 'Journal of American Geriatrics Society'.

Cancer increases the chances of people experiencing anxiety and mood issues which can affect emotional and social well-being. In turn, this may lead people to discontinue cancer treatments--which can mean shortening their survival.

Chemotherapy can benefit older adults with cancer, even though older people receiving this type of treatment often experience higher rates of dangerous side effects than younger people do. Older adults often experience anxiety and other mood disorders during their treatment for cancer, too--and treating those problems with medications can often cause potentially dangerous side effects.

What's more, many anti-anxiety medications are potentially inappropriate for older adults. That's why it is desirable to seek alternative treatments that are safe and effective at improving anxiety, mood disturbances, and emotional and social well-being, including treatments that don't rely on medications.

The researchers examined the Exercise for Cancer Patients (EXCAP) programme, a home-based, low- to moderate-intensity aerobic and resistance exercise programme. In the study, those who were assigned to the EXCAP program received an exercise kit. It contained a pedometer, three exercise bands (medium, heavy, extra heavy), and an instruction manual.

During the programme, participants increased the length and intensity of their workouts over time. For example, participants received an individually tailored, progressive walking routine, and they wore a pedometer and recorded their daily steps over six weeks, starting on their first day of chemotherapy treatment.

They were encouraged to gradually increase their steps by five to 20 per cent every week. For resistance exercise, they performed exercises with therapeutic exercise bands. Participants were given individually-tailored workout plans that encouraged them to perform 10 required exercises (such as squats and chest presses) and four optional exercises daily.

Participants were also encouraged to increase the intensity and number of repetitions of resistance band exercises gradually over the course of the programme.

The researchers concluded that a low- to moderate-intensity home-based exercise programme improved anxiety, mood, and social and emotional well-being for older patients with cancer who received chemotherapy treatments.

The researchers also noted that in the study, the people who benefited the most from the exercise program were older adults who received chemotherapy and started off with worse anxiety, mood, and social and emotional well-being.

## **Exercise improves anxiety, mood**

### **Exercise improves anxiety, mood in elderly cancer patients undergoing chemotherapy (New Kerala: 20190709)**

<https://www.newkerala.com/news/read/169002/exercise-improves-anxiety-mood-in-elderly-cancer-patients-undergoing-chemotherapy.html>

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The study was published in the 'Journal of American Geriatrics Society'.

Cancer increases the chances of people experiencing anxiety and mood issues which can affect emotional and social well-being. In turn, this may lead people to discontinue cancer treatments--which can mean shortening their survival.

Chemotherapy can benefit older adults with cancer, even though older people receiving this type of treatment often experience higher rates of dangerous side effects than younger people do. Older adults often experience anxiety and other mood disorders during their treatment for cancer, too--and treating those problems with medications can often cause potentially dangerous side effects.

What's more, many anti-anxiety medications are potentially inappropriate for older adults. That's why it is desirable to seek alternative treatments that are safe and effective at improving anxiety, mood disturbances, and emotional and social well-being, including treatments that don't rely on medications.

The researchers examined the Exercise for Cancer Patients (EXCAP) programme, a home-based, low- to moderate-intensity aerobic and resistance exercise programme. In the study, those who were assigned to the EXCAP program received an exercise kit. It contained a pedometer, three exercise bands (medium, heavy, extra heavy), and an instruction manual.

During the programme, participants increased the length and intensity of their workouts over time. For example, participants received an individually tailored, progressive walking routine, and they wore a pedometer and recorded their daily steps over six weeks, starting on their first day of chemotherapy treatment.

They were encouraged to gradually increase their steps by five to 20 per cent every week. For resistance exercise, they performed exercises with therapeutic exercise bands. Participants were given individually-tailored workout plans that encouraged them to perform 10 required exercises (such as squats and chest presses) and four optional exercises daily.

Participants were also encouraged to increase the intensity and number of repetitions of resistance band exercises gradually over the course of the programme.

The researchers concluded that a low- to moderate-intensity home-based exercise programme improved anxiety, mood, and social and emotional well-being for older patients with cancer who received chemotherapy treatments.

The researchers also noted that in the study, the people who benefited the most from the exercise program were older adults who received chemotherapy and started off with worse anxiety, mood, and social and emotional well-being.

## **New high BP guidelines**

### **New high BP guidelines may increase gestational hypertension detection (New Kerala: 20190709)**

<https://www.newkerala.com/news/read/168959/new-high-bp-guidelines-may-increase-gestational-hypertension-detection.html>

New high blood pressure guidelines could increase detection of gestational hypertension, finds a new study.

The clinical guidelines for hypertension were released by the American College of Cardiology (ACC) and the American Heart Association (AHA) in 2017 in non-pregnant adults in 2017.

The study was published in the journal 'Circulation Research'.

"Timely, accurate diagnosis of gestational hypertension is crucial for preventing associated conditions for pregnant women like preeclampsia and postpartum chronic hypertension. Infants born to women with gestational hypertension are more susceptible to preterm birth and adverse long-term health outcomes like young adulthood cardiovascular diseases," said Jie Hu, the study's first author.

"Incorporating the 2017 ACC/AHA guidelines into prenatal care practice could improve detection of high blood pressure during pregnancy and the efforts to reduce adverse maternal and neonatal outcomes in the perinatal period that are related to gestational hypertension," said

Hu and the international collaborative team used systolic and diastolic blood pressure measurements obtained from the medical records of 16,345 women from a maternal and child health care hospital in Wuhan, China. Blood pressure measurements were recorded by obstetricians during prenatal care visits across various stages of pregnancy.

Using the 2017 ACC/AHA guidelines, the investigators identified 4,100 women (25.1 per cent) with hypertension. In contrast, only 678 (4.2 per cent) of the women were found to have hypertension using the previous guidelines, indicating a substantial increase in the prevalence of gestational hypertension compared to the previous definition.

The investigators acknowledge that the findings will need to be replicated in more ethnically, racially and socioeconomically diverse populations, as well as in other nations aside from China.

Future studies are necessary to determine whether more frequent diagnoses of hypertension lead to improved neonatal outcomes for mothers and infants.

According to the researchers, current management strategies for gestational hypertension include continued observation and careful follow-up of blood pressure. Medication is only used in severe cases.

## **Respiratory symptoms**

### **Respiratory symptoms may predict life expectancy in elder people (New Kerala: 20190709)**

<https://www.newkerala.com/news/read/168822/respiratory-symptoms-may-predict-life-expectancy-in-elder-people.html>

A recent study has suggested that some respiratory symptoms may predict an earlier death in older adults, adding that such predictions differ with smoking status.

In the study published in the journal of *Respirology*, researchers studied 2087 older Australians with 22 years of follow-up, shortness of breath predicted a shorter life expectancy irrespective of smoking status. Cough in former smokers and wheeze in current smokers predicted shorter life expectancy.

The estimated remaining life expectancy of a 70-year-old male never smoker with no symptoms was 16.6 years. The years of life lost for a 70-year-old male current smoker with cough, shortness of breath, and wheeze compared with a never smoker with no symptoms was 4.93 years with 2.99 years being attributed to their current smoking and the remainder to their respiratory symptoms.

"If older people are experiencing even mild respiratory symptoms, they may benefit from visiting their general practitioner for further investigations," said the lead author of the study Kate Petri.

## **Nano Plastics (Hindustan: 20190709)**

[http://epaper.livehindustan.com/imageview\\_122512\\_71471596\\_4\\_1\\_09-07-2019\\_i\\_18.pagezoomsinwindows.php](http://epaper.livehindustan.com/imageview_122512_71471596_4_1_09-07-2019_i_18.pagezoomsinwindows.php)

वैज्ञानिकों ने मानव शरीर में प्रवेश करने वाले नैनो प्लास्टिक के खतरों को रेखांकित किया

# खून का प्रवाह रोक रहा प्लास्टिक



नई दिल्ली | हिन्दुस्तान टीम

नैनो प्लास्टिक इंसानी शरीर पर किस तरह बुरा असर डालते हैं, इस पर काफी शोध हुआ है। भारत सहित दुनिया के कई देशों के वैज्ञानिकों ने इस मामले पर गहन अध्ययन किया है। इसमें यह पाया गया है कि प्लास्टिक के दूसरे किस्म के अत्यंत सूक्ष्म कण मानव शरीर के लिए जानलेवा बनते जा रहे हैं। यह शरीर में जमकर खून के प्रवाह को रोक देते हैं।

इस बात का खुलासा तो पहले ही हो चुका है कि खुली आंखों से नजर न आने वाले ऐसे प्लास्टिक के कण भोजन के माध्यम से इंसानी शरीर के अंदर प्रवेश करते हैं। वहीं लिपिस्टिक, मसकारा, शैम्पू और पानी की बोतलों की वजह से भी यह नैनो प्लास्टिक शरीर के अंदर पहुंच जाता है। इंसान को इस खतरे का पता न होने की वजह से इनका खूब इस्तेमाल होता है। बता दें कि हर साल विश्व स्तर पर 400 मिलियन टन से अधिक प्लास्टिक का उत्पादन होता है।



**400** मिलियन टन से अधिक प्लास्टिक का उत्पादन होता है विश्व में हर साल

**13** से 600 नैनोमीटर पाया गया है इंसानी शरीर में प्रवेश करने वाले नैनोप्लास्टिक का आकार

## सफेद और लाल रक्त कोशिकाओं को नुकसान

वैज्ञानिकों ने अपने प्रयोग में यह भी पाया कि लाल और सफेद रक्त कोशिकाओं के संपर्क में आने के बाद ऐसे नैनो प्लास्टिक एक खास तौर की रासायनिक प्रतिक्रिया पैदा करते हैं। इससे सफेद और लाल दोनों प्रकार की रक्त कोशिकाएं मर जाती हैं। इनके मर जाने के बाद यह जहर शरीर में आगे बढ़ते हुए अन्य कोशिकाओं को मारता जाता है। शोधकर्ता इस शोध का परिणाम सामने आने के बाद अब नये सिरे से इसके आगे के परीक्षणों की तैयारी में हैं, जिसमें वे इस किस्म के नैनो प्लास्टिकों की जटिल प्रक्रियाओं के दौरान हरकतों को देखना और उससे शरीर के आंतरिक अंगों में गहराई तक पड़ने वाले प्रभावों को जांचना चाहते हैं।

यह सौंदर्य प्रसाधन, खाद्य पैकेजिंग, बर्तन आदि उद्योगों में मौजूद रहता है।

भारत के वेल्लोर इंस्टिट्यूट ऑफ टेक्नोलॉजी के विशेषज्ञ व प्रोफेसर नटराजन चंद्रशेखरन और उनके सहयोगियों ने इसके खतरों का गहन विश्लेषण किया है। उन्होंने अध्ययन में

यह देखा है कि शरीर के अंदर प्रवेश करने के बाद ऐसे छोटे-छोटे प्लास्टिक के कण क्या कुछ प्रभाव डालते हैं। इसमें पाया गया कि ऐसे नैनो प्लास्टिक शरीर के अंदर मौजूद खून के प्रोटीन के साथ चिपकते जाते हैं जिससे शरीर में खून का प्रवाह रुकने लगता है। इसके

चलते खून में मौजूद प्रोटीन काम करना बंद कर देते हैं। जैसे-जैसे यह काम धीमा होता जाता है, शरीर के अंदर अन्य बीमारियां पनपने लगती हैं क्योंकि आंतरिक अंगों को पर्याप्त मात्रा में साफ खून और उसमें मौजूद प्रोटीन नहीं मिल पाते हैं।

**Food and Nutrition ((Hindustan: 20190709)**

[http://epaper.livehindustan.com/imageview\\_122512\\_71467208\\_4\\_1\\_09-07-2019\\_i\\_18.pagezoomsinwindows.php](http://epaper.livehindustan.com/imageview_122512_71467208_4_1_09-07-2019_i_18.pagezoomsinwindows.php)

# अखरोट-बादाम खाने से वजन घटाना आसान होगा

शोध

नई दिल्ली | हिन्दुस्तान टीम

एक ताजा शोध के अनुसार नियमित रूप से अखरोट और बादाम खाने से दिल का दौरा पड़ने का खतरा कम होता है और वजन काबू में रखने में भी मदद मिलती है। सभी जानते हैं कि अखरोट और बादाम सेहत के लिए अच्छे होते हैं लेकिन इन्हें जरूरत से ज्यादा भी नहीं खाना चाहिए।

येना यूनिवर्सिटी के प्रोफेसर मिसाइल ग्लार्ड बताते हैं, इससे ब्लड शुगर और लिपिड मेटाबोलिज्म के पैरामीटर पर असर होता है जिससे टाइप टू डायबिटीज के अलावा दिल की बीमारियों और उच्च रक्तचाप का जोखिम कम होता है। प्रोफेसर ग्लार्ड के अनुसार बादाम हमारा जीवन लंबा करता है।



## बैड कोलेस्ट्रॉल में आती है कमी

म्यूनिख मेडिकल कॉलेज में अखरोट पर शोध किया गया। शोध में भाग लेने वाले एक व्यक्ति हैं डीटर गैशविट्स। आठ हफ्तों तक उन्होंने हर दिन एक मुट्ठी यानी 43 ग्राम अखरोट खाया। उसके बाद तुलनात्मक अध्ययन के लिए आठ हफ्ते तक कोई अखरोट नहीं खाया। उन्होंने हर दिन बराबर कैलरी का सेवन किया। अखरोट का सबसे महत्वपूर्ण असर खून में मौजूद वसा पर था। खराब कोलेस्ट्रॉल समझे जाने वाले एलडीएल में अखरोट की वजह से 7 प्रतिशत की कमी आई।

## दिल का दौरा पड़ने की संभावना कम

म्यूनिख मेडिकल कॉलेज के प्रोफेसर पार होफरल का कहना है, शायद यही संभव कारण है कि नियमित रूप से अखरोट खाने वाले मरीजों को दिल का दौरा कम पड़ता है, क्योंकि हमें पता है कि एलडीएल कोलेस्ट्रॉल दिल की बीमारियों में अत्यंत महत्वपूर्ण भूमिका निभाता है।