

# Chile all set to launch Covid vaccination for children aged three and above

Chile will join Venezuela, Colombia and neighbouring Argentina as it will launch the vaccination drive for children from age three



**SANTIAGO:** Chile announced it would start vaccinating children aged three and up against the coronavirus, after successfully inoculating around 90 percent of its initial target population. Children under the new rollout will receive the Chinese CoronaVac shot already used for kids aged six to 15, the Public Health Institute said.

For 16 to 18-year-olds, Chile uses the Pfizer/BioNTech vaccine. The decision to use different shots was based on studies with CoronaVac in China that showed the Chinese vaccine had a higher rate of adverse reactions in older children than in younger ones, the institute said. Chile joins Venezuela, Colombia and neighbouring Argentina in vaccinating children from age three. Nicaragua and Cuba are vaccinating toddlers as young as two.

Younger children will also start getting vaccinated in Europe, where the EU's drug regulator on Thursday cleared the Pfizer/BioNTech shot for use in children aged five to 11. Chile, with a population of 19 million, has so far vaccinated some 13.8 million people, over 90 percent of its target group of adults aged 18 and older. Some 1.75 million people have contracted the virus in Chile, and 38,000 have died, according to official figures.

## UK toughens COVID-19 rules as new Omicron strain arrives

**LONDON:** Britain on Saturday announced tougher entry rules for all arriving passengers and the return of a masks mandate, after confirming its first two cases of the new Omicron strain of Covid-19. The cases were both linked to travel from southern Africa, and the government also expanded travel restrictions on the region with the addition of four countries to a "red list". Prime Minister Boris Johnson said face masks would again be required in shops and on public transport, after controversially ditching the mandate in July when he reopened the UK economy after a prior nationwide lockdown. He signalled no new lockdown now, vowing a review of the new measures in three weeks and expressing hope that Britons could look forward to a more festive Christmas than last year. "But we now need to go further and implement a proportionate testing regime for arrivals from across the whole world," Johnson told a hastily arranged news conference, hours after the government confirmed the first two Omicron cases. "So we are not going to stop people travelling... but we will require anyone who enters the UK to take a PCR test by the end of the second day after their arrival, and to self-isolate until they have a negative result," he said. Currently, all Britons and foreigners entering the UK are required to take a PCR test on day two after their arrival. The new rules add the requirement for isolation pending a negative result, significantly toughening the regime, in a bid to curb the spread of the new strain. "I very much hope that we will find that we continue to be in a strong position and we can lift these measures again," Johnson said. "But right now this is a responsible course of action." The prime minister did not specify when the new testing regime and masks mandate would enter into force. But effective early Sunday, the government said it was placing another four African countries on its travel ban -- Malawi, Mozambique, Zambia and



## How effective are anti-aging diets? Here's what science tells us

**M**ANY anti-aging diets are being promoted as ways to extend your lifespan. However, much of the research on anti-aging diets has been done in animals — not humans. Researchers caution that data on the benefits of these diets for people is limited. Speak with your doctor before you begin any new diet to make sure it's a healthy choice for you. For years, certain foods have been promoted as the key to a long and healthy life, from common vegetables and "healthy" fats to powders made from exotic plants. But a number of anti-aging diets focus not on what you should eat, but instead on limiting your intake of food overall or restricting your meals to certain days or times of the day. These diets include calorie restriction, intermittent fasting, fasting-mimicking diet, the keto diet, and time-restricted feeding. All of these are intended to not only increase your life, but also extend the number of years you're in good health, known as lifespan and healthspan, respectively. Much of the research on anti-aging diets has been done in non-human organisms — from microbes to worms to rodents. One reason for this is that it's easier to follow the entire lifespan of these creatures, because their lives are so much shorter. Research in people is also starting to suggest that some dietary patterns may help people live longer and age more gracefully. However, some researchers caution that data on the benefits of these diets for people is limited — especially when it comes to knowing if eating a certain way can extend the human lifespan. "Despite their recent popularization, there is not yet strong evidence that any of the anti-aging diets studied in laboratory animals have substantial long-term health benefits in non-obese humans," wrote Matt Kaeberlein, PhD, and his colleagues in a review in the journal *Science*. In the *Science* paper, Kaeberlein and his colleagues reviewed existing research on anti-aging diets, focusing on studies done in rodents, and whenever possible, people. In the rodent studies, the most promising anti-aging diets involved calorie restriction. This included the "classic" calorie restriction diet, where daily calories are reduced by 20 to 50 percent, and a variation that involves reducing overall calories but maintaining protein intake.

## Here's where covid-19 cases are rising and falling



**A**ccording to figures from the Centers for Disease Control and Prevention (CDC), the average number of new COVID-19 cases increased to about 88,000 a day, about 15,000 more than early last week. The numbers include the 150,000 new cases reported. The total number of new COVID-19 cases for the week that ended Sunday, Nov. 7, was listed at 578,563, a jump of 13 percent from the previous week. However, deaths attributed to COVID-19 for the same time period were listed as 7,944, a decrease of 7 percent from the prior week. Hospitalizations are sitting at nearly 45,000, about the same as a week ago. Meanwhile, the 7-day average of vaccine doses administered in the United States rose to nearly 1.5 million as adults are getting booster shots and children 5 to 11 years old become eligible for vaccination. Overall, the United States has reported 47 million COVID-19 cases since the pandemic began. Deaths related to COVID-19 in the United States have now surpassed 770,000. The CDC issued a new report Trusted Source that stated unvaccinated people were more than twice as likely to be hospitalized with COVID-19 than vaccinated people and more than 7 times as likely to die from the disease. The rate of transmission of the coronavirus that causes COVID-19 on a county-by-county basis as of Nov. 16. Source: CDC Experts say the pandemic isn't behind us yet. "We cannot let our guard down, or the virus will continue to find and infect unvaccinated persons and send them to the hospital," Dr. William Schaffner, an infectious disease specialist from Vanderbilt University in Tennessee, told Healthline. "It is still incredibly important to get vaccinated, wear your masks, practice good hygiene, and do all you can to protect yourself and those around you," Dr. Jamila Taylor, director of healthcare reform and a senior fellow at The Century Foundation, told Healthline. When might we see the end of the pandemic, and what might life look like, at least in the United States? "It is hard to even envision this thing being completely eliminated," Taylor said. "Even if the virus itself were to be eliminated, the effects will be seen over the long term, for sure. The economic, mental, and physical health effects of COVID-19 have changed the lives of millions of people."

## Study shows how vitamin D could halt lung inflammation in Covid-19



**A** special form of Vitamin D — not found over the counter (OTC) — may be able to combat lung inflammation caused by immune cells, a new study suggests. The research shows vitamin D has a "switch-off" mechanism for inflammation, which could work in severe Covid-19. However, clinical trials are needed before vitamin D is adopted to treat Covid-19 or other respiratory diseases. The researchers warn against people taking more than the recommended amount of vitamin D in hopes of staving off Covid-19 infection. Scientists are sharing insight into how vitamin D could help in severe Covid-19 cases by revealing how the vitamin functions to reduce hyper-inflammation caused by immune cells. A new joint study by Purdue University and the National Institutes of Health (NIH) demonstrates how an active metabolite of vitamin D — not a form sold OTC — is involved in "switching off" inflammation in the body during infections such as Covid-19. "Since inflammation in severe cases of Covid-19 is a key reason for morbidity and mortality, we decided to take a closer look at lung cells from Covid-19 patients," said lead authors Dr. Behdad (Ben) Afzali, chief of the Immunoregulation Section of the NIH's National Institute of Diabetes and Digestive and Kidney Diseases, and Dr. Majid Kazemian, assistant professor of biochemistry and computer science at Purdue University. As part of the study, researchers analyzed individual lung cells from eight people with Covid-19. They found that in these cells, part of the immune response to SARS-CoV-2 — the virus that causes Covid-19 — was going into overdrive and exacerbating inflammation in the lungs. After administering vitamin D in test-tube experiments, they observed reduced lung cell inflammation. They then dove further into how the vitamin achieved this. —AFP



## What is good health?

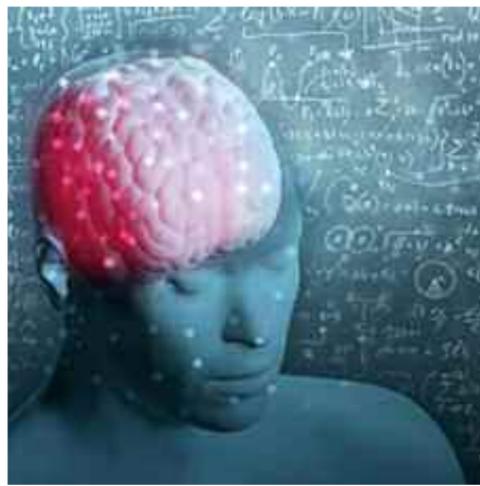
**T**he word health refers to a state of complete emotional and physical well-being. Healthcare exists to help people maintain this optimal state of health. According to the Centers for Disease Control and Prevention (CDC), healthcare costs in the United States were \$3.5 trillion in 2017.

However, despite this expenditure, people in the U.S. have a lower life expectancy than people in other developed countries. This is due to a variety of factors, including access to healthcare and lifestyle choices. Good health is central to handling stress and living a longer, more active life. In this article, we explain the meaning of good health, the types of health a person needs to consider, and how to preserve good health. In 1948, the World Health Organization (WHO) defined health with a phrase that modern authorities still apply.

"Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." In 1986, the WHO made further clarifications: "A resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities." This means that health is a resource to support an individual's function in wider society, rather than an end in itself. A healthful life-style provides the means to lead a full life with meaning and purpose. In 2009, researchers publishing in *The Lancet* re-defined health as the ability of a body to adapt to new threats and infirmities. They base this definition on the idea that the past few decades have seen modern science take significant strides in the awareness of diseases by understanding how they work, discovering new ways to slow or stop them, and acknowledging that an absence of pathology may not be possible.

Mental and physical health are probably the two most frequently discussed types of health. Spiritual, emotional, and financial health also contribute to overall health. Medical experts have linked these to lower stress levels and improved mental and physical well-being.

People with better financial health, for example, may worry less about finances and have the means to buy fresh food more regularly. Those with good spiritual health may feel a sense of calm and purpose that fuels good mental health. —Agencies



## Why are human neurons different from those of other mammals?

**A** group of researchers has discovered that human neurons have significantly fewer ion channels than other mammalian neurons. The lower density of ion channels may contribute to the more efficient brain function in humans. The neuroscientists' findings pave the way for future research into the evolutionary forces behind this distinction.

Neurons are the building blocks of the central nervous system, which includes the brain and spinal cord. They share information via electrical impulses and chemical signals. The human brain contains about 100 billion neurons. Neurons are generated by the activity of ion channels, which control the movement of mineral ions, including potassium and sodium. Typically in mammalian brains, as the size of neurons increases, the density of the ion channels in the neurons also increases. To the surprise of neuroscientists from the Massachusetts Institute of Technology, in Cambridge, and Harvard Medical School, in Boston, this was not the case for human neurons.

Lou Beaulieu-Laroche, Ph.D., a neuroscientist and the study's lead author, explained in a recent LinkedIn post: "These findings have important implications for understanding our outstanding cognitive abilities and the challenges [that] therapies derived from animal models face in human clinical trials." Dr. Beaulieu-Laroche calls this paper his "highest scientific achievement." Neuronal size determines neuronal input-output features — how likely a neuron is to "fire" following a certain level of input from other neurons. The size of neurons also varies widely across mammalian species. The team of researchers analyzed brain samples from people with epilepsy who had undergone neurosurgical treatment, Etruscan shrews, mice, rabbits, and macaques, among other mammals. The researchers aimed to "characterize layer 5 cortical pyramidal neurons across 10 mammalian species to identify the allometric relationships that govern how neuronal biophysics change with cell size." The authors chose this population of neurons because they are "reliably identifiable," and scientists have studied them extensively. —Agencies