



### Typhoid vaccine for infants 'safe'

A trial vaccine against typhoid, a disease that kills more than 200,000 people every year, is safe for use. Aimed at children under two, who are disproportionately affected, the vaccine may prevent more than half of all typhoid infections. Dubbed Vi-TT, the vaccine studied in the trial is already licensed for use in infants in India, but nowhere else, nor are there any other vaccines for children under two.



### Skipping breakfast double arteries risk

People who skip breakfast or eat poorly to start the day are twice as likely to develop hardened arteries, which can lead to deadly heart disease. A recent study uncovered signs of damage to the arteries long before symptoms or disease developed. The findings could offer an important tool in the fight against cardiovascular disease.

PET VET

**Dr. Rajani Rajesh**

### Benefits of keeping a pet

**A**nimals have been a central feature of human life for many thousands of years. Evidence suggests that pet keeping has been practiced continuously throughout human history.

In today's world almost everyone experiences stress on a daily basis. When thinking of ways to reduce stress in life, usually techniques like meditation, yoga and deep breathing come to mind. These are great techniques, to be sure. But getting a new best friend can also have many stress relieving and health benefits. In my opinion, there is nothing better in this world than the unconditional love you get from a dog or cat or any pet in your life. Animals have been demonstrated to improve human cardiovascular health, reduce stress, decrease loneliness and depression, and facilitate social interactions among people who choose to have pets.

Pets are beneficial to children also. They are thought to teach responsibility, build empathy, more positive behavior among children and promote concern for animals and the natural world. Other studies document that children exposed to pets in early life experience enhanced immune function with some exceptions.

Recent work on the hormonal basis of the human-animal bond has shown oxytocin peaks in both people and their dogs when they interact positively. This 'feel good' hormone is also released when people are in close physical contact and suppresses the production of cortisol, the stress hormones.

Animal-assisted therapy (AAT) is often used to describe any situation where an animal is brought into a therapeutic setting. The therapeutic use of pets to enhance the mental and physical health of a wide variety of individuals, including people with AIDS or cancer, older adults living in institutions, and individuals with mental illness, has received increasing amounts of attention. The most recognized role for assistance animals is as guide dogs for those with impaired sight.

*(The views and opinions expressed in this article are those of the author and do not necessarily reflect the policy or position of this newspaper.)*

# ZIKA MUTATED AROUND 2013

**Miami**  
**Z**ika has been around for decades but only recently began to cause birth defects due to a single mutation the mosquito-borne virus likely acquired in 2013, researchers.

The report in the US journal Science explains for the first time how this once relatively harmless virus transformed into a global health threat.

The mutation in one of its structural proteins, called pRM, is believed to have arisen prior to the 2013 outbreak in French Polynesia, said the Science report.

That change in the pathogen's protective coat made the virus more likely to kill developing brain cells in mice and people compared to older versions of the virus, experiments showed.

The change, known as S139N, which involved the replacement of a serine amino acid with an arginine amino acid, was one of "numerous changes" the Zika virus acquired throughout its



Representational image

genome between 2010 and 2016, said the report.

Zika was first discovered in a monkey in Uganda in 1947. In people, it was known to cause a rash and mild illness that soon passed.

But in 2015, Brazil -- the nation hardest hit by the outbreak -- reported its first cases of babies born with unusually small heads.

This condition, known as microcephaly, was later linked to Zika infection in pregnant mothers.

Zika has now spread to 84 countries. The virus is contagious and can be transmitted by sexual contact or by the bite of an infected mosquito.

The World Health Organization declared Zika

an international public health emergency in February 2016, then lifted that order in November of the same year.

Zika is particularly dangerous to pregnant women, and is now known to raise the risk of Guillain Barre Syndrome in adults and microcephaly and other brain-related birth defects in infants. (AFP)

## Switching to e-cigs would delay millions of deaths: study

**Paris**  
**A** large-scale switch from tobacco to e-cigarettes would cut smoking-related deaths by a quarter in the United States by 2100, even assuming the gadgets are themselves not risk-free, researchers said yesterday.

Scientists are still unsure about the potential harms of "vaping" as an alternative to traditional cigarettes, though most seem convinced it is at least safer.

Hypothesising that an e-cigarette carries only five percent of the health risk of the real McCoy, and that only

a handful of people will still smoke tobacco by 2026, the researchers said 6.6 million premature deaths could be

prevented by 2100. This represented a 25-percent drop from the 26.1 million premature deaths



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projected under the status quo, with 19.3 percent of American men and 14.1 percent of women smoking in 2016, the study showed.

Per smoker, this amounted to an average gain in life expectancy of about four months, according to findings published in the journal Tobacco Control.

In a more pessimistic scenario which assumes that e-cigarettes come with about 40 percent of the risk of traditional smokes, some 1.6 million premature deaths are avoided, said the research team.

This works out to an average life expectancy gain of just under a month per person.

A death is notched up as premature when a person departs before their expected age -- say 75 or 80 depending on the country -- and is usually preventable through a healthier lifestyle.

Research is continuing into the risks and benefits of e-cigarettes, with critics fearful the gadget's "safer" image will create a new generation of nicotine addicts and act as a gateway to traditional smoking.

But even under the

researchers' pessimistic scenario, there were "gains to a strategy that used e-cigarettes to reduce cigarette smoking," study co-author David Levy of the Georgetown University Medical Centre in Washington said.

The benefits were "massive", commented John Britton of the UK Centre for Tobacco & Alcohol Studies.

The findings, he said via the Science Media Centre, "demonstrate the importance of embracing, rather than rejecting, the potential of this new generation of nicotine products."