

Asthma classes in school may help reduce attacks

SYDNEY: School-age children with asthma who receive education on managing the condition may have fewer attacks, emergency room visits and hospitalizations than those who don't get such classes, a recent study suggests.

Asthma is one of the most common chronic diseases in childhood. Severe asthma attacks and breathing problems are associated with an increased risk of health problems like obesity as well as academic challenges like chronic absences from school and cognitive impairments that can lead to lower grades and test scores.

For the current study, researchers analyzed data from 33 prior studies that tested how well school-based asthma management programs help kids to avoid severe symptoms that can take a toll on their health and school performance.

All of these smaller studies included children with asthma from 5 to 18 years old, and randomly assigned some kids to get asthma education while others went without this instruction.

With the school-based asthma interventions, students were 30 percent less likely to visit the emergency room, suggesting they had fewer severe asthma attacks, researchers report in the journal *Thorax*.

"For children who cannot easily ac-

cess healthcare providers, schools may be a particularly effective route for the delivery of self-management education," said lead study author Dylan Kneale of University College London in the UK.

"Among children who may otherwise



have low levels of contact with healthcare providers, interventions provided in schools may provide something of a safety-net for recognizing the symptoms of asthma, the delivery of medication, and the teaching of self-management skills," Kneale said by email.

Compared to children who didn't get asthma-management training in school, those who did also appeared to have fewer hospitalizations and fewer days when their symptoms were so severe that they had to cut back on activities.

The study didn't find a connection be-

searchers note. These include: reinforcement of regular monitoring of lung function; instruction on inhaler techniques; creation and review of written asthma management plan for each kid; and education on when to use rescue inhalers and maintenance drugs to control symptoms.

Most of the studies in the analysis were done in the U.S. and Canada. That is a limitation, the authors point out, because the effect of school-based programs might be more pronounced in U.S. schools, where children are more likely to be uninsured or lack access to care, than in other countries where access and affordability are less of a problem.

The smaller studies in the analysis also used a wide variety of methods for assessing the effectiveness of school-based asthma programs, and that made it hard to measure exactly how much impact these interventions had on reducing hospitalizations, the researchers note.

Even so, the results reinforce the essential role schools can play in asthma management, said Dr. Deepa Rastogi, director of the pediatric asthma program at Montefiore Health System and a professor at Albert Einstein College of Medicine in New York City.

"Children tend to learn better about asthma management in school settings,"

randomly assigned classrooms, tracking improvements in aspects ranging from vocal and social interaction skills to verbal cognition and adaptive behaviors via intervention methods, researchers said in a statement on Sunday.

The findings confirmed that supporting preschoolers with autism in mainstream early childhood settings was achievable, said the university's researcher Dr. Kristelle Hudry. "We found that the overall quality of the learning and teaching environment in the mainstream playrooms was exceptionally high and graded equal when compared to the specialized playrooms," said Hudry.

"This means the extra training and added requirements involved in including children with autism into mainstream classrooms did not detract from student development or reduce the amount of attention staff gave to typically developing children.

"Autism is a developmental disorder that includes difficulties with social interaction and restricted behavior. About one in 200 Australians are affected by autism and most of them are boys, according to health industry figures. The symptoms may be noticeable from the age of two but a firm diagnosis usually cannot be made until a child is three years old.—AFP

Another report adds: Children with autism are able to thrive in mainstream preschools just as well as in specialized settings, in new findings that point to the need for kids with disabilities to learn with their peers, according to latest Australian research.

The La Trobe University study, touted as the first of its kind, involved more than 40 children aged between 15 and 32 months over a period of three years in

Push-up capacity may predict men's heart disease risk

LONDON: The number of push-ups a man can do in the doctor's office may be a good predictor of his risk of developing heart disease in the coming years, new research suggests.

In a study of more than 1,100 male firefighters followed for 10 years, researchers found that the risk of atherosclerosis and of cardiovascular events, such as stroke and heart attack, was 96 percent lower among men who could do 40 or more push-ups during timed tests compared to the men who could do fewer than 10.

The findings could lead to an easy test for heart disease risk, said the study's lead author Dr. Justin Yang, a researcher at Harvard's T. H. Chan School of Public Health in Boston.

"Using push-ups could be a no-cost and simple method to assess one's functional capacity and predict future cardiovascular event risk," Yang said. "For clinicians this is really important since a lot of tests vary in their results and are very expensive and time consuming. This can be done within a minute."

To look at possible predictors of heart disease, Yang and his colleagues turned to data on 1,104 Indiana firefighters who had health exams between February 2, 2000 and November 12, 2007. Along with push-up capacity, a host of other measurements were recorded at the same time, including age, VO2 max (the maximum rate of oxygen consumed during intense exercise), height, weight, resting heart rate, blood pressure levels, cholesterol levels, blood sugar levels and smoking status.

At baseline, the firefighters' average age was 39.6 years and their average body mass index (BMI, a ratio of weight to height) was 28.7, which is in the "overweight" range. "With firefighters pictured on calendars as muscular and very fit, we tend to think of them as different from everyone else, but this group is pretty much the same as the rest of the population," Yang said. "Half of them were overweight or obese."

During the study period, there were 37 cardiovascular disease-related outcomes among the men, according to the report in *JAMA Network Open*.

While other factors, such as age, BMI and VO2 were also predictive of the risk for cardiovascular disease events, push-ups were the strongest indicator, Yang said.

One strength of the new study is that it relies on a measure of strength rather than on self-reports of physical activity, said Kerry Stewart, a professor of medicine and director of clinical and research exercise physiology at the Johns Hopkins School of Medicine in Baltimore, Maryland.

Stewart suspects that the men's push-up capacity is simply a marker for their level of fitness. "You have to be pretty fit to do that many push-ups," said Stewart who was not involved in the new research. "You would probably have to do a good amount of exercise on a regular basis to get to the level of 40 or more."

And fitness, Stewart said, is correlated with a number of factors, including blood pressure, cholesterol levels and abdominal fat. The findings underscore the importance of guidelines that emphasize both resistance training and aerobic exercise, Stewart noted.

Dr. Dennis Bruemmer wasn't surprised by the findings. "We have long known that physical inactivity constitutes a risk factor for cardiovascular disease and is associated with worse outcomes," said Bruemmer, an associate professor of medicine and a cardiologist at the Heart and Vascular Institute at the University of Pittsburgh Medical Center in Pennsylvania. "Conversely, physical activity decreases cardiovascular risk."—Reuters



Mindful eating can help you lose weight

NEW YORK: In recent years, mindfulness – defined as "a mental state or attitude in which one focuses one's awareness on the present moment" – has become embedded into our everyday language.

Mindfulness has helped many people to develop the skills necessary to manage chronic pain, depression, anxiety, stress and sleeping disorders. It has also become a popular way to change eating behaviours under the term "mindful eating".

Mindful eating encourages people to pay attention to food with all of their senses, noticing the physical and emotional responses that take place before, during and after an eating experience. Mindful eating teaches people to use wisdom to guide eating decisions, acknowledge food preferences non-judgementally and recognise physical hunger cues.

Although its purpose is not to lose weight, mindful eating can help those struggling to follow long-term diets by correcting their attitudes towards "good" and "bad" foods. Eating mindfully is also said to help reduce, emotional eating and promotes the consumption of smaller portions and fewer calories.

Dubbed the "great masticator", Fletcher argued that "head diges-

tion" (a person's emotional state when eating) played a significant role in their food choices. Consequently, it was advisable to chew each mouthful of food 32 times (one for each tooth) in order to improve one's physical and mental well-being.

- First: Wait for a true, earned appetite.
- Second: Select from the food available that appeals most to appetite, and in the order called for by appetite.
- Third: Get all the good taste there is in food out of it in the mouth, and swallow only when it practically "swallows itself".
- Fourth: Enjoy the good taste for all it is worth, and do not allow any depressing or diverting thought to intrude upon the ceremony.
- Fifth: Wait; take and enjoy as much as possible what appetite approves; nature will do the rest.

In 1913, Fletcher published his first book on the topic, *Fletcherism: What It Is or How I Became Young at Sixty*, his advice bears a striking similarity to mindful eating guidelines today. Likewise, Fletcher maintained that an awareness of the food in the mouth led to "wonders of new and pleasant sensations, new delights of taste and new leanings of appetite". These recommendations to eat intentionally and

and increased body strength and stamina, and would fend off illness and tiredness.

Fletcher's book quickly became a bestseller and his methods were taken up by such eminent figures as Arthur Conan Doyle, Franz Kafka, Theodore Roosevelt and Mark Twain.

The cereal producer John Harvey Kellogg also implemented Fletcherism in his Battle Creek Sanitarium in Michigan, US and

even hired a quartet to write *The Chewing Song* – as featured in *The Road to Wellville* – a film about Kellogg to promote its benefits.

Soon, Fletcherism was being advocated for children as a way to teach them to be aware of their bodies and minds. Thanks to avid campaigning from the health reformer, Bernard MacFadden, it was added to school hygiene textbooks by 1914.

Fletcherism was also considered beneficial to prisoners and soldiers, with one criminal claiming that it had enabled him to break the bad habits of a lifetime, as he learnt that "dietary righteousness went hand-in-hand with spiritual well-being".

Throughout the first half of the 20th century, "munching clubs" emerged across the US and Britain, with "Fletcherites" getting together to eat mindfully in what can be considered an early form of group mindfulness.

However, after Fletcher's death in 1919, the practice slowly lost momentum, and mindful eating was instead replaced with a more unhealthy approach to food – and so was born the calorie counting diet. This was based largely on the consumption of diet pills, chewing gum, laxatives and Lucky Strike cigarettes.—AFP

It also highlights the global nature of disease control, in which a hot spot of infection in one country can ignite a distant outbreak in an immunization-weak spot of another, said Dr. Scott Lindquist, Washington's top epidemiologist. Here are some key facts about measles and immunization, according to public health experts and the CDC.

A 95 percent rate of immunization is required to provide sufficient "herd" protection in a given population. Rates as low as 60 percent were found in parts of New York where measles spread, Zucker said. Symptoms typically include high fever, cough, runny nose and watery eyes, followed by tiny white spots inside the mouth and a red rash that can cover the body.

Serious and potentially fatal complications, especially in young children and pregnant women, can include pneumonia and swelling of the brain. Ear infections occur in about 10 percent of children with measles and can lead to permanent hearing loss.—AFP

Money troubles tied to higher risk of heart disease for African-Americans

WASHINGTON: African-American adults who often struggle to pay bills may be more than twice as likely to develop heart disease than their counterparts who don't have much financial stress, a US study suggests.

Heart disease is the leading cause of death in the U.S., and African-Americans are more likely to develop the condition than people from other racial and ethnic groups. Some previous research has linked financial stress to an increased risk of chronic health problems, but whether money troubles are a factor contributing to heart disease in the African-American population isn't as well understood, the study team writes in *American Journal of Preventive Medicine*.

For the current study, researchers examined data on 2,256 African-American men and women participating in the long-term Jackson Heart Study in Mississippi from 2000 to 2012. None of the participants had evidence of heart disease at the start of the study.

After an average follow-up period of 9.6 years, 98 people, or about 4 percent of the participants, experienced a heart attack, cardiac hospitalization or another event related to heart disease.

"We found that psychological



feelings of stress due to finances were related to the onset of heart disease, such as heart attacks and procedures used to treat heart attacks – even when other issues like access to care, or difficulty affording medications were considered," said senior study author Dr. Cheryl Clark of Brigham and Women's Hospital and Harvard Medical School in Boston.

"While it may be difficult to turn around finances quickly, there are treatments and strategies to reduce stress and stress-related diseases," Clark said by email. "Patients should always discuss concerns about heart health with a physician, and make sure that issues such as depression, or other heart disease risks are treated to lower their risk of heart disease."—AFP

Low vaccination rates, global outbreaks fuel US measles spread

NEW YORK: A measles outbreak that has stricken at least 225 people in New York state since October began with a traveler who visited Israel during the Jewish high holidays and returned to a predominantly ultra-Orthodox Jewish neighborhood of Rockland County.

A similar pattern unfolded three months later and nearly 3,000 miles (4,800 km) away when a person who visited Eastern Europe returned to a community with strong ties to a local church group in Vancouver, Washington. More than 50 people fell ill there.

In both instances, U.S. travelers picked up measles in foreign countries where the highly contagious disease was running rampant and brought it back to places where vaccination rates were too low by U.S. public health standards, setting off the worst outbreaks seen in those states in decades.

The U.S. Centers for Disease Control and Prevention says New York's outbreak marks the highest tally of imported cases since measles was declared eradicated in the

United States in 2000. The two outbreaks appear to be winding



down, health officials say, after concerted efforts to pinpoint the origins and isolate and inoculate those who were exposed but unprotected and educate parents who had re-

sisted vaccines.

The disease has spread mostly among school-age children whose parents declined to get them vaccinated. Most cited philosophical or religious reasons, or concerns – debunked by medical science – that the three-way vaccines against measles, mumps and rubella (MMR) could cause autism, authorities said. New York State Health Commissioner Dr. Howard Zucker said another key factor was mere "complacency" in an age where the potential ravages of measles are unfamiliar to parents who came of age after the vaccine was introduced in 1957.

In Rockland County, the suburb north of Manhattan accounting for the bulk of cases the state has vaccinated 15,000 children since the outbreak began there last autumn, Zucker said. The Brooklyn borough of New York City was another hot spot.

Still, officials say the measles crisis in New York and Washington states offer a lesson about the importance of maintaining a minimum level of "herd" immunization against dangerous, preventable diseases such

More young adults binge drinking well into their 20s

LONDON: More young men and women are binge-drinking into their mid- and late-20s today than a generation ago, increasing their risk of accidental injuries, deaths and a variety of chronic illnesses, researchers say.

Historically, binge drinking among both men and women has tended to increase from age 18 through the early 20s then subside afterwards, the authors of a recent study note in *Alcoholism: Clinical and Experimental Research*.

For the current analysis, researchers followed 58,012 high school graduates from 1976 to 2004, tracking their drinking habits from graduation through age 30. During the study period, the peak age for binge drinking by women rose from 20 to 22, and from

21 to 23 among men. By the end of the study, more women were continuing to binge drink from ages 21 through 30 and more men were still binge drinking at ages 25 to 26 than had been the case in the past, the analysts also found.

"We have certainly seen a lot of social changes during the past 30 years in many areas of life," said lead study author Megan Patrick of the University of Minnesota in Minneapolis.

"The average ages of marriage and childbearing have increased, more young adults attend college and fewer of them are employed, which all likely contribute to the continuation of binge drinking further into the twenties," Patrick said by email.—AFP