

# Tea drinkers to have a longer and healthier life

A study has revealed that drinking tea at least three times a week was connected with healthy years of life and longer life expectancy. The research was published in the European Journal of Preventive Cardiology, a journal of the European Society of Cardiology (ESC). Dr Xinyan Wang, who is the author of the study said, "Habitual tea consumption is associated with lower risks of cardiovascular disease and all-cause death. The favourable health effects are the most robust for green tea and for long-term habitual tea drinkers."

The analysis that was conducted included about 100,902 participants of the China-PAR project2 with no history of heart attack, stroke, or cancer. Participants were classified into two groups: habitual tea drinkers and never or non-habitual tea drinkers and followed-up for a median of 7.3 years. The analyses estimated that 50-year-old habitual

tea drinkers would develop coronary heart disease and stroke 1.41 years later and live 1.26 years longer than those who never or seldom drank tea. Compared with never or non-habitual tea drinkers, habitual tea consumers had a 20 per cent lower risk of incident heart disease and stroke, 22 per cent lower risk of fatal heart disease and stroke, and 15 per cent decreased risk of all-cause death. The potential influence of changes in tea drinking behaviour was suspected in a subset of 14,081 participants with assessments at two-time points. The average duration between the two surveys was 8.2 years, and the median follow-up after the second survey was 5.3 years. Habitual tea drinkers who maintained their habit in both surveys had a 39 per cent lower risk of incident heart disease and stroke, 56 per cent lower

risk of fatal heart disease and stroke, and 29 per cent decreased risk of all-cause death compared to consistent never or non-habitual tea drinkers.



Senior author Dr Dongfeng Gu, said, "The protective effects of tea were most pronounced among the consistent habitual tea drinking group. Mechanism studies have suggested that the main bioactive compounds in tea, namely polyphenols, are not stored in the body long-term. Thus, frequent

tea intake over an extended period may be necessary for the cardioprotective effect."

In a subanalysis by type of tea, drinking green tea was linked with approximately 25 per cent lower risks for incident heart disease and stroke, fatal heart disease and stroke, and all-cause death. However, no significant associations were observed for black tea. Dr Gu noted that a preference for green tea is unique to East Asia.

Two factors may be at play. First, green tea is a rich source of polyphenols which protect against cardiovascular disease and its risk factors including high blood pressure and dyslipidaemia. Black tea is fully fermented and during this process, polyphenols are oxidised into pigments and may lose their antioxidant effects. Second, black tea is often served with milk, which

previous research has shown may counteract the favourable health effects of tea on vascular function.

Gender-specific analyses showed that the protective effects of habitual tea consumption were pronounced and robust across different outcomes for men, but only modest for women. Dr Wang said, "One reason might be that 48% of men were habitual tea consumers compared to just 20 per cent of women. Secondly, women had a much lower incidence of, and mortality from, heart disease and stroke. These differences made it more likely to find statistically significant results among men."

She added, "The China-PAR project is ongoing, and with more person-years of follow-up among women the associations may become more pronounced." In conclusion, the authors found that randomized trials are required to validate the results and to illustrate nutritional guidelines and advice for lifestyle.

# Study reveals surprisingly good news on anxiety

says Esme Fuller-Thomson, lead author of the study.

Fuller-Thomson is Director of the University of Toronto's Institute for Life Course and Aging and Professor at the Factor-Inwentash Faculty of Social Work and the Department of Family and Community

confidant can foster a sense of belonging and self-worth which may promote recovery," says co-author Kandace Ryckman, a recent graduate of the University of Toronto's Masters of Public Health. The researchers found that poor physical health, functional limita-



Medicine. "This research provides a very hopeful message for individuals struggling with anxiety, their families and health professionals. Our findings suggest that full recovery is possible, even among those who have suffered for many years with the disorder," she said. Individuals who had at least one person in their lives who provided them with a sense of emotional security and wellbeing were three times more likely to be in excellent mental health than those without a confidant.

"For those with anxiety disorders, the social support that extends from a

tions, insomnia and a history of depression were impediments to excellent mental health in the sample. "Health professionals who are treating individuals with anxiety disorders need to consider their patients' physical health problems and social isolation in their treatment plans," says Ryckman.

The researchers examined a nationally representative sample of 2,128 Canadian community-dwelling adults who had a generalized anxiety disorder at some point in their lives. The data were drawn from Statistics Canada's Canadian Community Health Survey-Mental Health.

## Scientists find technique to prevent deaths due to postpartum haemorrhage

TWO recent studies have found out that Uterine Balloon Tamponade (UBT) technique is about 86 per cent effective in maternal death that takes place due to postpartum hemorrhage (PPH).

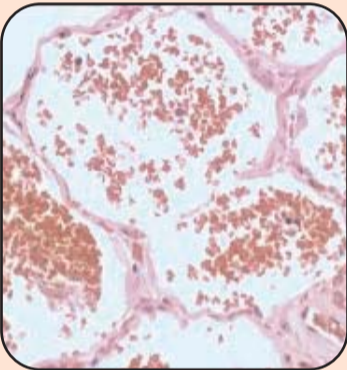
The study was published in the recent edition of the journal American Journal of Obstetrics and Gynecology. According to the latest statistics of the World Health Organisation, more than 800 women die every day from preventable causes that are related to pregnancy and childbirth & the major reason is postpartum hemorrhage (PPH).

Advanced interventions that could be used to stop the bleeding before the problem becomes unmanageable require high-tech equipment and extensive training which very few hospitals around the globe have access to. UBT, on the other hand, is quite simpler and has been available since the 1980s. The technique involves insertion of balloon through the cering catheter and is inflated with water which fills the uterine cavity and arrests hemorrhage.

"The reason we undertook this study is that those two trials caused a great deal of confusion and controversy regarding UBT. We decided to take an extremely rigorous approach, bringing together all of the world's literature on this technique and inviting independent investigators to join. It was a massive project," said researcher Thomas Burke.

The researchers conducted a meta-analysis combined with a systematic review of 91 randomized control trials, nonrandomized studies, and case series, and concluded that the overall success rate of the UBT technique is 85.9 per cent.

"There's no question the device works fine. But saving a life is much more complex than just handing someone a device that's new to their practice. We need to study how to integrate the device into a health system so that good uptake, appropriate use, and best practice result in quality care," Burke said. The researchers also pointed out that it is clear that maternal mortality drops significantly in many parts of the world where UBT technique is used for its treatment.



## Study focuses on young women getting unnecessary pelvic exams

ROUTINE pelvic examinations and cervical cancer screenings are no longer recommended for most females under age 21, but a new study has found that millions of young women are unnecessarily undergoing these tests, which can lead to false-positive testing, over-treatment, anxiety and needless expenses.

Researchers at UC San Francisco and the Centers for Disease Control and Prevention (CDC) estimated that 1.4 million pelvic examinations and 1.6 million Pap tests performed on US females between the ages of 15 to 20 years in a single year may have been medically unnecessary. The findings suggest that despite professional guidelines and recommendations against routine pelvic examinations and Pap tests in this age group, there's a critical lag in clinical practice. The estimated cost of these unnecessary exams was approximately USD 123 million a year. The study was published in the journal JAMA Internal Medicine. "Recent media reports have called attention to inappropriate gynecologic examinations in young women," said senior author George F.

Sawaya, MD, professor of Obstetrics, Gynecology and Reproductive Sciences at UCSF and director of the UCSF Center for Healthcare Value. "Parents of adolescents and young women should be aware that cervical cancer screening is not recommended routinely in

asymptomatic women who are not pregnant. The new analysis was intended to estimate how often pelvic examinations and Pap tests occurred among young women in the U.S., as well as the proportion that was potentially unnecessary. The population-



based study used data from 2011 to 2017. The investigators estimated that of approximately 2.6 million young women who received a pelvic exam during the previous year, more than half (54.4 per cent) were potentially unnecessary, representing an estimated 1.4 million young women. Young women who had been screened for a sexually transmitted infection were 3.8 times more likely to receive a Pap test and 60 per cent more likely to receive a pelvic examination, compared with those who had not been screened.

that LADA has more in common with T1D than with T2D from a genetic perspective. Researchers further took a deeper dive and looked for genetic differences that could help in distinguishing between T1D and LADA. In the end, the team of researchers found out that when it came to the T1D group, the results from the earlier studies held: the controlling for genetic variants that were in one part of the MHC revealed the variants present in another part of MHC. The researchers, however, did not find the same effect with LADA patients.

## Genetic differences distinguish Children's type 1 diabetes from Adults' type 1.5

RESEARCHERS from Philadelphia have discovered a genetic signature that could be helpful in distinguishing pediatric-onset T1D from the adult-onset form of diabetes sharing type1 diabetes (T1D).

This discovery which was published in the journal - Diabetes Care - has opened the door to straightforward diagnostic tests for the adult condition and for improving responses by ensuring that patients receive appropriate treatment. "This is our first insight into genetic differences between latent autoimmune diabetes in adults and T1D in children that may be diagnostically useful. We have found a genetic means of discriminating between the two conditions without expensive and cumbersome antibody screening," said the lead researcher Struan Grant.

Latent autoimmune diabetes in adults (LADA) is often also known as 'type 1.5 diabetes' as it consists of characteristics of both T1D and type 2 diabetes (T2D). LADA produces auto-antibodies that attack the insulin-producing beta cells present in the pancreas. Patients with LADA get diagnosed with the same during adulthood and do not require insulin at the time of diagnosis.

This is why LADA is often misdiagnosed as T2D. According to certain studies, up to 10% of T2D diagnoses are, in fact, LADA, and this is why patients do not respond to the commonly inappropriate treatments prescribed to them. Another study found



conditions. When a sensitivity test was conducted to the two cohorts, researchers continued to observe the effect only in T1D patients and not in the patients with LADA.

"This suggests that these MHC class associations may be a genetic discriminator between LADA and childhood-onset T1D. The next step is to look at this association in different ethnicities, particularly African ancestry, where the prevalence of adult-onset diabetes can be significantly higher in certain parts of the world," said a researcher Diana Cousminer.

While controlling for genetic variants in MHC in such patients, researchers did not observe any additional association within this key region, which is an important genetic distinction between the two given

## Scientists unravel the complexities of childhood obesity in recent study

A recent study conducted by the researchers of University of Notre Dame has examined how psychological characteristics like loneliness, shyness, and anxiety of obese children combined with similar characteristics of their family dynamics affect outcomes of nutritional intervention. Researchers found a network effect that suggested personalised, comprehensive approach to the treatment could improve the results of nutritional interventions. "Psychological characteristics clearly have interactional effects. We can no longer simply view them as individualized risk factors to be assessed. We need to account for the specific characteristics for each child, viewing them as a holistic set for which to plan treatment," said the lead researcher Nitesh Chawla. The researchers conducted the study by analysing the psychological assessments and medical records of 1,541 children who participated in the program. According to the researchers, strong family dynamics, such as concern for behavior and treatment and a sense of protectiveness for the child lead to improved outcomes of nutritional interventions. "This is quantitative evidence of the success and failure of interactions as they relate to the characteristics and interactions between the child and the parent or guardian," said Chawla.

## Study suggests early intervention in hyperkalemia can cut mortality by half

A new study has suggested that correcting high potassium levels immediately in patients suffering from hyperkalemia can cut the mortality rate in the population by half. The study was published in the journal called American Journal of Emergency Medicine. In the study, researchers reviewed around 115000 patients and found that the mortality rate was significantly reduced in such patients. "Because of the increasing risk of hyperkalemia in this population, it is important, as our study showed, to develop protocols that help quickly identify and correct hyperkalemia while the patient is still in the emergency department," said Dr Singer. Tens of thousands of patients that suffer from diseases like heart failure, diabetes, renal failure, and hypertension have higher risks of developing hyperkalemia. In the future, many therapies that would be deduced to treat these conditions might also contain high potassium levels.