



### Stress hormone measured in hair predicts who is likely to suffer from cardiovascular diseases

New research presented at the European Congress on Obesity (ECO) in Dublin, Ireland, suggests that the levels of glucocorticoids, a class of stress hormones, found in an individual's hair may indicate their likelihood of developing cardiovascular diseases (CVD) in the future.

The study, conducted by researchers from Erasmus University Medical Centre Rotterdam in the Netherlands, examined the long-term levels of scalp hair cortisol and hair cortisone, which are biomarkers representing the cumulative exposure to glucocorticoids over several months.

The researchers analysed hair samples from over 6,000 adults enrolled in the Lifelines study, a large-scale research project in the Netherlands.

After following the participants for an average of 5.7 years, the researchers found that individuals with higher long-term cortisone levels were twice as likely to experience a cardiovascular event such as a stroke or heart attack. This risk was even higher in participants aged 57 or younger, where the likelihood rose to over three times.

It is important to note that this study is observational and does not establish a cause-and-effect relationship between stress and cardiovascular disease. However, the findings suggest a strong link between long-term stress hormone levels and the incidence of CVD.

The study has some limitations. It only included participants from a specific region in the Netherlands, and most participants self-identified as white. Therefore, the findings may not be generalisable to other populations.

Overall, this research highlights the potential role of chronic stress in determining an individual's cardiovascular health and underscores the importance of further investigation in this area.

## Expert oncologist offers insight on cancer

An in-depth discussion with Dr Tanujaa Rajasekaran, senior consultant at Parkway Cancer Centre

#### STAR HEALTH REPORT

Singapore Parkway Cancer Centre is a renowned medical facility dedicated to providing exceptional cancer care. With a multidisciplinary approach and a team of highly skilled oncologists, they offer comprehensive treatment options for various types of cancers. From advanced therapies to personalised medicine, Parkway Cancer Centre is at the forefront of cancer treatment, delivering innovative and compassionate care to patients. Their commitment to excellence has made them a trusted destination for cancer management in Singapore and beyond.

Dr Tanujaa Rajasekaran, a senior consultant and medical oncologist at Parkway Cancer Centre, recently shared her views on cancer with Star Health. She has extensive experience in general medical oncology and specialised expertise in the management of lung, genitourinary, head and neck cancers, and geriatric oncology.

Lung cancer remains a significant global health concern, despite a decrease in incidence due to anti-smoking campaigns and tobacco control efforts. While lung cancer rates have declined in smokers, there has been an alarming increase in cases among non-smokers, particularly younger individuals, and females. The reasons behind this trend are not yet fully understood but may involve genetic mutations and unidentified factors. Smoking is the primary risk factor for lung cancer, but other factors like family history, radiation exposure, second-hand smoke, and certain occupational hazards can contribute.

Lung cancer can manifest with respiratory symptoms such as coughing, difficulty breathing, or coughing up blood. It can also present with weight loss, loss of appetite, and specific symptoms depending on the organs affected by metastasis. Early-stage lung cancer often goes undetected due to the absence of noticeable symptoms, leading to late-stage diagnoses.

Regular screenings, such as CT scans, are recommended for individuals aged



Dr Tanujaa Rajasekaran,  
Senior consultant at Parkway  
Cancer Centre (PCC)

55-74 with a significant smoking history. However, the effectiveness of lung cancer screening for non-smokers is still under investigation, and there is no definitive answer regarding its benefits for this population.

Prevention of lung cancer involves eliminating risk factors, with smoking cessation being crucial. Even long-term smokers can reduce their risk by quitting. A healthy lifestyle, including a balanced diet and regular exercise, is also beneficial.

Advancements in lung cancer treatment have transformed its management. Targeted therapies that block specific genetic mutations, like the epidermal growth factor receptor (EGFR) mutation, have improved prognosis and extended the life expectancy of patients. In Asia, where a significant percentage of lung cancer cases are EGFR-positive, oral targeted medications have revolutionised treatment, allowing patients to control their cancer without traditional chemotherapy. This personalised approach has positively impacted the lives of Asian lung cancer patients.

Research focused on Asian lung cancers, including the EGFR mutation subtype, is ongoing to better understand

and treat this specific population. Targeted therapies offer hope for improved outcomes and quality of life for lung cancer patients, demonstrating the power of personalised treatment options.

Continued efforts in research, prevention, and early detection are essential in combating lung cancer and reducing its impact worldwide.

Prostate cancer is the most common type of cancer in men, especially among older individuals. Risk factors include advancing age, family history, and genetic mutations like BRCA gene alterations. Symptoms can include urinary issues, blood in the urine, incomplete bladder emptying, weight loss, and loss of appetite. Prostate cancer can also be incidentally discovered during routine screenings, such as PSA tests.

Treatment options for localised prostate cancer depend on factors like the Gleason score and PSA levels. Active surveillance is suitable for low-risk cases, while surgery (prostatectomy) and radiation therapy are other options. Recent advancements in prostate cancer treatment include hormonal therapies that target testosterone, oral hormonal agents, PARP inhibitors for specific genetic mutations, and radiopharmaceutical therapy that delivers targeted radiation to prostate cancer cells.

Prevention of prostate cancer is not entirely possible, but adopting a healthy lifestyle can reduce the risk. Regular exercise and avoiding smoking are beneficial. High-risk individuals, such as those with a family history or genetic mutations, should undergo regular screenings and consult healthcare professionals for monitoring and early detection.

Prostate cancer remains a significant health concern, but advancements in treatment options provide hope for improved outcomes and management. Increased awareness, early detection, and personalized treatment approaches are essential for combating prostate cancer effectively.

#### HAVE A NICE DAY

### When a 'psycho' becomes your Boss!

DR RUBAUL MURSHED

One of the most psychological classic movies of the 20<sup>th</sup> century, Hitchcock's 'psycho' has reinforced the common misconception that people with mental illnesses are always dangerous.

Psychopathy is an illness characterised in part by low emotional responses, antisocial behaviours, and lack of understanding and kindness. They may have features such as superficial charm, high merit, failure to learn from experiences, egoism with poor judgment, and lack of repentance. Most psychopaths are mean and undefinable. They are more like arsenic (a slow-working poison) than cyanide. They are pathological liars and good at manipulative behaviour. They may have an increased risk for cruelty, but not all psychopaths are violent.

Research shows that there are also 'good' psychopaths. Many people in positively heroic professions have strong psychopathic personalities. Believe it or not! a psychopath can also fall in love. Even though it might be difficult to show these emotions, they can feel something resembling affection or even strong romantic passion. Researchers suggest that they can make up at least 1% of the population. That could include your friend, neighbour, colleague, or maybe even your boss, who seems normal initially.

The good news is that there are treatments for Psychopaths. Treatments such as Cognitive Behavioural Therapy (CBT) may help reduce certain psychopathic behaviours and characters.

This is a psycho-social intervention that aims to reduce symptoms of various mental health conditions and primarily depression and can help to manage problems by changing the way a psycho thinks and behaves. The most effective approaches to treating psychopaths are multimodal, including multiple strategies simultaneously. Other than psychotherapy, it includes behavioural skills training and recognition of the important roles of family and social surroundings.

E-mail: rubaيلمurshed@shomman.org



## Keep your brain young and increase creativity

#### AMIT SARKER

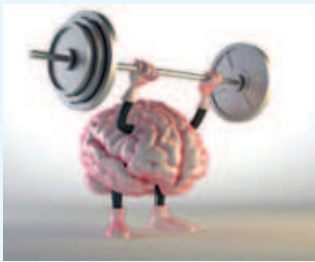
The brain exercises extensively every day, some activities can alter the brain functions, potentially may enhance memory, brain power, and creativity. Let us delve some ways which can help you to boost your brain function and discover your creativity.

Meditation helps the mind focus in a relax, controlled manner. Being spontaneous, which is closely related to creative freedom is impossible if you are constantly doubting yourself rather than having faith in your gut. You can follow your creative thoughts with meditation and do so without criticising the process. Meditation may also help the brain by reducing brain aging and improving information processing.

Visualisation is a process of forming an image in your head to represent information. The mental image could take the shape of still images or animated scenes. People who use visualisation are better able to organise their information and make wise decisions.

The most classical methods of memory and intellectual development through brain training are games and puzzles.

Memory card games test a person's short-term memory and pattern recognition skills. These are an easy and enjoyable way to connect the mind and memory. Additionally, crossword puzzles are another popular activity that may stimulate the brain and facilitate divergent thinking. Furthermore, number puzzles may also help some people's



cognitive performances.

Chess helps people with their executive functioning, which is the capacity to keep track of and adjust behaviour to achieve pre-determined goals. It also improves the information processing speed. Notably, the ability to solve problems is enhanced by video games, just like other games and puzzles. Altogether, these can boost your brain health and help to uncover your creativity.

Learning new skills or teaching new skills to someone else engages the brain in new ways and may enhance brain function. Additionally, learning new languages also increase knowledge and strengthen connectivity between different part of the brain. You require a great deal of knowledge in order to generate new concept, develop strategies and adopt novel viewpoints.

Spending time with friends (socialising) can help to maintain cognitive function. People who interacts with others more frequently has a lower risk of dementia and cognitive decline, increases planning, problem solving and multitasking ability.

Overall, no matter your age, concentrating on your brain health is one of the best things you can do to enhance your concentration, focus, memory, and mental agility. By including brain exercises in your daily activities, you can push your mental limits, improve your cognitive abilities, and perhaps even pick up some interesting new knowledge and creativity.

The writer is a Lecturer of Department of Pharmacy at Primeasia University, Dhaka, Bangladesh.  
E-mail: amit.pharmacy30@gmail.com

## New studies highlight the importance of addressing alcohol and metabolic syndrome in gout management

#### STAR HEALTH REPORT

Two recent reports serve as a reminder that addressing lifestyle factors and behaviours is important in the management of gout.

The first study conducted in Korea analysed data from a large health service database and found that individuals with metabolic syndrome, characterised by certain components such as abdominal obesity, high blood pressure, and abnormal cholesterol and glucose levels, were four times more likely to develop gout compared to those without metabolic syndrome.



Another study from China focused on the presence of tophi, which are deposits of uric acid crystals that can accumulate in joints and tissues of individuals with gout. The

researchers discovered that patients who consumed excessive amounts of alcohol or even moderate amounts were approximately twice as likely to have tophi compared to those who did not drink alcohol.

These findings emphasise the need for a comprehensive approach to managing gout, which includes not only appropriate medication but also lifestyle modifications to reduce the risk factors associated with the condition. By addressing these factors, healthcare professionals can potentially improve the outcomes and overall well-being of individuals with gout.

United Hospital

United Cardiac Centre

# Save Your Heart!

## OPEN HEART SURGERY

Starts from **BDT 2.5 Lac**

**Dr. Sayedur Rahman Khan**  
MBBS, MS (CTS)  
Senior Consultant  
Cardiac Surgery

**Dr. Rezaul Hassan**  
MBBS, MS (CTS)  
Senior Consultant  
Cardiac Surgery

**Dr. Mirza Abul Kalam Mohiuddin**  
MBBS, MS (CTS)  
Senior Consultant  
Cardiac Surgery

UNITED HEALTHCARE

Our Sister Concerns

United Medical College & Hospital

M A Rashid Hospital

medix

Appointment 02 22 22 82 488  
**10666**