

How chronic stress fuels the rise of diabetes

RAISA MEHZABEEN

With relentless deadlines and outdated expectations, stress has become a constant companion for millions. While its toll on mental health is well acknowledged, its impact on physical health—particularly blood sugar regulation—remains under recognised. This hidden risk may have serious consequences for many.

When the body encounters stress, it triggers the “fight or flight” response. The brain signals the adrenal glands to release stress hormones like cortisol and adrenaline. These hormones mobilise energy reserves, enabling the body to respond swiftly. While vital in short bursts, repeated stimulation from chronic stress can be harmful.

Cortisol is the key player in stress-induced blood sugar imbalance. During stress, it prompts the liver to release glucose through gluconeogenesis, ensuring immediate energy. However, cortisol



also reduces insulin sensitivity, impairing glucose absorption and raising blood sugar. Over time, this can contribute to insulin resistance and increase the risk of type 2 diabetes.

Chronic stress exacerbates blood sugar regulation. Prolonged cortisol elevation can lead to persistent hyperglycaemia, a driver of metabolic disorders. Studies show that those facing ongoing stress—from work pressures to financial strain—are more prone to insulin resistance.

Stress also fuels poor habits: unhealthy diets, lack of exercise, and disrupted sleep, all of which worsen blood sugar control.

Though stress is inevitable, its effects can be managed. Regular exercise, a balanced diet, and relaxation techniques like meditation help lower cortisol and stabilise blood sugar. Workplaces must also support mental well-being to reduce stress-related health risks.

Reducing stress is not only vital for mental peace—it's essential for metabolic health.

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NUTRITION SUMMIT 2025

A national call to action for better health

STAR HEALTH REPORT

Aiming to raise public awareness about nutrition, the Nutrition Summit 2025 was held for the first time in Bangladesh on 31 January and 1 February at the Shaheed Abu Sayeed International Conference Centre, Shahbagh, Dhaka. The two day event was inaugurated by National Professor AK Azad Khan, President of BADAS and Chief Advisor of the Summit.

Nearly 1,000 participants, including renowned nutritionists, dietitians, academic experts, representatives from national and international food and nutrition organisations, and safe food producers, joined the summit. Across eight scientific sessions, 24 distinguished speakers presented 25 topics. Additionally, open sessions were held for the general public, where leading nutritionists discussed 12 topics, correcting common misconceptions and educating attendees on how nutrition can prevent disease. Interactive sessions included demonstrations on healthy cooking, and more than 500 attendees received personalised diet plans from clinical nutritionists.

In his inaugural remarks, Chief Coordinator Dr Md Fazlurabi Khan explained the rationale behind the summit. He highlighted the alarming rates of malnutrition among mothers and children in Bangladesh. Citing the

Global Hunger Index, he noted that 24% of Bangladeshi children under five are stunted, and 11% are wasted. “We have limited understanding of nutrition. Most people don't know what to eat, what to avoid, or how much energy they need daily based on their weight and height,” he said. He emphasised the need for a collective effort to address this gap and called for the creation of a knowledge-sharing platform involving all stakeholders.

Professor AK Azad Khan remarked that malnutrition now encompasses both undernutrition and overnutrition, with rising rates of overweight and obesity, compounded by micronutrient deficiencies. He called for the accreditation of nutrition professionals and suggested forming a separate council for nutrition if required.

Notable attendees at the inaugural session included M Saifuddin Ahmed, Secretary General of BADAS; Md Saidul Arefin, Director of INFS, University of Dhaka; Dr Zeba Mahmud, Country Manager at Alive & Thrive, FHI 360; Shamsun Naher Mohua, Chief Nutrition Officer at BIRDEM; Dr Nazma Shaheen, Professor at INFS, University of Dhaka; and Prof Dr Zahid Hasan, Registrar at BUHS. The session was chaired by Safina Rahman.

On the second day, a roundtable titled “Empowering All to Build a Healthy Nation” brought together

stakeholders to recommend ways forward. Participants included National Prof AK Azad Khan, Dr Mushtuq Husain, Dr Md Iqbal Hossain, Dr Abu Jamil Faisel, Prof Syeda Saliba Sultana, and representatives from FHI 360, Nutrition International, BIRDEM, and the National Press Club.

Following a lengthy discussion, the summit produced ten key recommendations, including:

1. Integration of nutrition into the national health system.
2. Nationwide awareness campaigns on diet and disease.
3. Curriculum reform for nutrition education.
4. Accreditation and regulation of nutrition professionals.
5. Structured career paths for nutritionists.
6. Inclusion of age-appropriate nutrition content in school curricula and healthy school meals.
7. Creation of nutritionist posts in hospitals nationwide.
8. Development of a national nutrition data repository.
9. Mandatory display of nutritional information in food outlets.
10. Establishment of a national nutrition surveillance agency.

The summit concluded with a strong call for collaboration, innovation, and policy reform to address Bangladesh's evolving nutritional challenges.

STUDY FINDINGS

Too much salt linked to higher risk of obesity

New research to be presented at the European Congress on Obesity (ECO 2025) in Málaga, Spain (11–14 May), reveals a strong link between dietary sodium intake and both general and abdominal obesity. Conducted by Annika Santalahti and colleagues from the Finnish Institute for Health and Welfare, the study analysed data from over 5,000 Finnish adults.

Findings showed that participants with the highest sodium intake—measured via food frequency questionnaires and urine samples—were significantly more likely to have obesity. Women in the highest sodium intake group were over four times more likely to have general obesity and 3.4 times more likely to have abdominal obesity compared to those in the lowest group.

Similar trends were found using urine sodium concentration. For men, results were statistically significant when based on urine sodium: those in the highest quartile were six times more likely to have general obesity.

Most sodium came from everyday processed foods such as bread, cheese, and processed meats—not just junk food. Researchers emphasise the need for systemic change, including collaboration with the food industry, to reduce population-level sodium consumption. They call for further research into the biological mechanisms linking salt intake to obesity.

Source: *The Lancet*



Mum's Health Matters: How early-life factors shape obesity risk

A new study suggests that factors beyond individual control—such as socioeconomic status and maternal health—can significantly influence the likelihood of becoming overweight or obese later in life. Led by Glenna Nightingale of the University of Edinburgh, the research was published on 26 March 2025 in PLOS ONE.

Using data from the 1958 National Child Development Study, which tracked over 17,000 people born in one week



in March 1958 across England, Scotland, and Wales, researchers examined weight outcomes at ages 16 and 42. They considered a range of early-life and social factors, including birth order, delivery method, job type, maternal smoking, and maternal obesity.

The study found that if a mother smoked or was obese, her child had a significantly higher risk of being obese or severely obese—both as a teenager and as an adult. These associations remained strong even before and after the rise in obesity rates in the UK, indicating that individual behaviours alone do not explain the current obesity crisis.

Researchers conclude that early-life and societal risk factors should be considered in obesity prevention efforts, and call for new studies focused on community-level drivers behind the global obesity epidemic.

Source: PLOS ONE

Unmasking the bitter reality of sugar

JANNATUN NAYMA

When we hear the term 'silent killer', conditions like high blood pressure or cancer often come to mind—illnesses that do severe damage without early symptoms. But there's another culprit quietly fuelling today's global health crisis: sugar.

Yes, sugar is a silent assassin. It's not just in obvious treats like soft drinks, sweets, and junk food—it's also lurking in so-called "healthy" items like yoghurts and granola bars. Shockingly, around 80% of packaged foods in supermarkets contain added sugars. With over 61 names for sugar listed on food labels, many of us unknowingly consume far more than we should. Why? Because sugar is addictive—and the food industry profits from that addiction.

Excessive sugar intake can lead to beta cell burnout, resulting in type 2 diabetes, requiring lifelong insulin. It also fuels inflammation, damages mitochondria, and harms your heart, liver, brain, and kidneys. As the saying goes: You're blind to diabetes—until you go blind from it.

An estimated 18 million deaths annually are linked to sugar-related illnesses—14 times higher than global road accident deaths. Sugar not only affects your physical health—causing obesity,

heart disease, stroke, cancer, and tooth decay—but also wreaks havoc on your mental health, leading to anxiety, depression, and mood swings.

So, how can you take control without giving up everything you love (yes, even ice cream)? Try these practical tips:

Follow the 80/20 rule: Eat healthy 80% of the time, leave 20% for indulgences.

Stay hydrated: Often, thirst disguises itself as hunger.

Avoid sugary drinks: Swap for water, herbal teas, or black coffee.

Create distance: Keep sugar-laden foods out of reach at home.

Read food labels: Know how to identify hidden sugars.

Start your day with protein, fruits, and vegetables: Stabilise blood sugar early.

Exercise daily: Boost mood-enhancing hormones and improve insulin sensitivity.

Your health is in your hands.

You don't need to live in fear—but you do need to be informed. You're the CEO of your body. Make smart choices today to avoid hospitals tomorrow. A small change now can prevent a massive health crisis later.

The article is compiled by Jannatun Nayma. E-mail: keyamahashina1985@gmail.com

SHARNALI SHINES

Bangladesh unveils homegrown solution to childhood malnutrition

STAR HEALTH REPORT

Recently icddr,b and UNICEF co-hosted a seminar titled “Effectiveness Trial of Locally Developed Ready-to-Use Therapeutic Food in Treating Severe Acute Malnutrition in Rohingya Camps” at icddr,b's Sasakawa Auditorium.

Dr Tahmeed Ahmed, Executive Director of icddr,b, chaired the event, joined by Chief Guest Ms Nurjahan Begum, Adviser to the Ministry of Health and Family Welfare, and Special Guest Ms Rana Flowers, UNICEF Representative to Bangladesh.

Highlighting persistent child stunting in Bangladesh, Dr Ahmed introduced Sharnali—a locally developed Ready-to-Use Therapeutic Food (RUTF) made from ingredients like rice, lentils, chickpeas, and

milk powder. He noted: “We can't hospitalise every malnourished child. Sharnali offers a community-based, cost-effective solution.”

Dr Md Munirul Islam presented promising trial results from Rohingya camps, showing both Sharnali-1 and Sharnali-2 formulations effectively treated severe acute malnutrition (SAM) in children aged 6–59 months.

Ms Flowers lauded the breakthrough: “Sharnali literally saves lives.” She called for scaling it up at the community level, adding, “It's not whether Bangladesh can afford it—but whether we can afford not to.”

Ms Begum compared Sharnali's potential to that of ORS, calling for reduced production costs and better maternal nutrition to fight SAM nationwide.

Source: icddr,b

REVOLUTIONISING REHAB

The rise of robotic physiotherapy in Bangladesh

BIJOY DAS

available locally, facilitating home-based therapy for stroke and mobility-impaired patients.

Innovations in affordable bionic limbs also mark progress toward inclusive, tech-driven rehabilitation. However, challenges remain: high costs, lack of trained personnel, and infrastructural limitations hinder widespread adoption.

Strategic investment and training programmes are essential for scaling up robotic rehabilitation.

Globally, robotic rehabilitation is booming. Valued at \$428 million in 2024, the global market is projected to reach \$50 billion by 2033. Ageing populations, healthcare workforce shortages, and AI-driven innovations fuel this growth.

In the UK, for example, researchers at the National Robotarium have developed “ARI”—a rehabilitation robot to support overburdened NHS services.

As Bangladesh embraces this future-forward approach, collaboration with the private sector, international partners, and the healthcare community will be crucial. With the right support, robotic physiotherapy could revolutionise rehabilitation and redefine recovery across the nation.

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Source: PLOS ONE