



TOXIC TEMPTATION: The hidden danger of food colours and adulteration in Bangladesh

DR B A SADIQ

Bangladesh's vibrant food culture is a feast for the eyes – from rainbow-hued sweets to brightly coloured street snacks. But beneath this colourful charm lies a dangerous truth: much of that colour is not natural at all. The growing use of artificial and industrial dyes in food has become a silent but severe public health crisis, threatening millions of consumers every day.

Across markets and restaurants, many popular foods—jilapi, chanachur, pickles, biryani rice, and fruit drinks—are often laced with non-permitted dyes such as Rhodamine B, Malachite Green, and Sudan Red. These chemicals are designed for textiles, plastics, and paints, not for human consumption. Yet, due to weak monitoring, limited awareness, and profit-driven motives, they continue to find their way into the nation's food chain.

Why it happens: Unscrupulous traders use industrial colours to make foods look more appealing and "fresh" that attracts buyer instantly. Natural food colours fade over time and are costlier, while synthetic industrial dyes are cheap, stable, and easy to mix. This economic incentive, combined with a lack of strict enforcement, fuels the cycle of adulteration.

Health hazards beyond imagination: The dangers are alarming. Long-term consumption of toxic dyes can lead to liver and kidney damage, hormonal imbalance, reproductive issues, and even cancer. Children are particularly at risk since their organs are still developing.

Moreover, these harmful substances are often added without any control over dosage, making the exposure even more

dangerous. What looks like an innocent colourful snack may, in reality, be a chemical cocktail.

The law vs reality: Bangladesh has strong food safety laws on paper—such as the Food Safety Act 2013 and the Pure Food Rules 1967—which prohibit the use of industrial chemicals in food. However, enforcement remains weak. Market inspections are irregular, penalties are inconsistent, and awareness among small-scale producers is minimal.

The Bangladesh Food Safety Authority (BFSA) and Bangladesh Standards and Testing Institution (BSTI) have taken steps to identify and penalise offenders, but without a sustained and coordinated effort, such measures are often temporary fixes.

The way forward: The solution lies in a threefold approach: regulation, education, and innovation. Authorities must strengthen inspection systems, increase random food testing, and impose heavier fines on violators. Equally important is public awareness—consumers must learn to question unnaturally bright foods and demand safer options.

On the brighter side, natural colour alternatives exist and are locally available. Encouraging food industries to adopt these safer, plant-based colours can ensure both visual appeal and public safety. Bangladesh's food should not only taste good and look attractive—it must also be safe to eat. It's time to choose health over harmful hues and let natural colours bring back the true flavour of life.

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Combating Cancer with Strength and Resilience

"I was affirmative then, and I am still affirmative now. It was my willpower that kept me firm in my battle against this illness," says "Raihan Islam, a retired senior ASP of a police station in Dhaka. Raihan, a 70-year-old lung cancer survivor, instead of being defeated by his diagnosis, showed an exemplary level of optimism during his fight against cancer. In a quest to maintain a healthy routine after his retirement and spend his days peacefully with his family, he unfortunately encountered one of the hardest phases of his life.

It all began in October 2023

He randomly felt pain in both of his shoulders during his routine walk. When the pain lingered for a few days and became unbearable, he went for a diagnosis. Raihan was diagnosed with high blood pressure and was advised to routinely monitor his blood pressure. "Unfortunately, my blood pressure kept increasing, which was surprising for me, as I never had high B.P. before," he says. Later that month, he was diagnosed with a lung tumour, which came as a great shock to him. Before he could process this shock, he was also diagnosed with hyperinflated lungs and eventually underwent surgery for it. He immediately flew to Bangkok for proper diagnosis and treatment of his tumour after recovering from the surgery. "To my horror, my lung tumour was confirmed there. But due

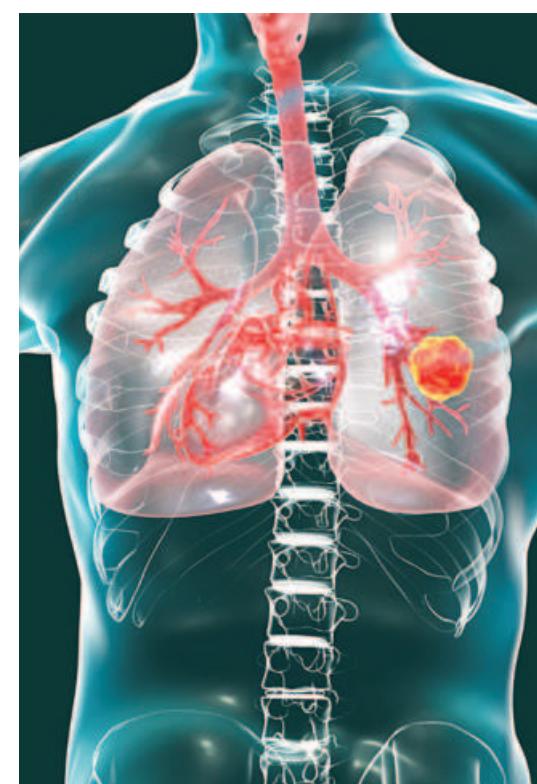
high expenses I was forced to return to Bangladesh, leaving it unattended," he admits.

Immediate treatment followed by expenses

After returning to Bangladesh, with the help of his surgeon friend, he underwent a tumour removal surgery. Despite the successful removal of the tumour, he was later diagnosed with lung cancer during the follow-up biopsy. "Even when I was informed about my cancer, I did not lose hope and still went for immunotherapy under Professor Dr Kazi Manzur Kader," he says. The therapy started in February 2024 and was completed with 12 doses (200 mL per dose) of Pemro. When he was asked about his expenses, Raihan really praised his

BEACON
Light for life

Reported by
-Ammarah Laika Mohiuddin



SUPERBUGS ON THE RISE

The world is running out of effective antibiotics!

DR MUNIRUDDIN AHMED

On October 13, *The Guardian* published an alarming report titled 'Sharp global rise in antibiotic-resistant infections in hospitals, WHO finds.' The World Health Organisation (WHO) warned that infections once easily curable with conventional antibiotics are now becoming untreatable. Physicians fear that in the coming years, antibiotic resistance will make even common infections dangerously difficult to treat.

According to a 2023 global survey, one in six laboratory-confirmed infections is now resistant to antibiotics. About 40% of infections of the blood, intestines, urinary tract and reproductive system show resistance to common antibiotics. Most concerning, antibiotics are proving ineffective against Gram-negative bacteria. Experts predict that by 2050, antibiotic resistance may reach 70% worldwide, threatening to reverse decades of medical progress.

This crisis is not new. Back in 2017, WHO warned that the world is running out of antibiotics. Its report, *Antibacterial Agents in Clinical Development Including Tuberculosis*, revealed a stagnation in the discovery of new antibiotics.

WHO's Director of Essential Medicines, Dr Suzanne Hill, has called for urgent investment in antibiotic research, warning that 'humanity is left with almost no shield against these deadly pathogens.'

merely modified chemical versions of older drugs—offering temporary relief but no lasting solution. As bacteria evolve rapidly, effective antibiotics are disappearing even faster. Without new drugs, doctors may soon face situations where minor surgeries become life-threatening due to resistant infections.

Among the most dangerous pathogens today are *Escherichia coli* (*E. coli*) and *Mycobacterium tuberculosis*, responsible for urinary tract infections and tuberculosis (TB).

WHO has identified 12 priority bacterial species that are multidrug-resistant, including strains that cause pneumonia and hospital-acquired infections! Against many of these, no effective antibiotics remain.

WHO currently lists 51 antibiotics under development, but only eight are expected to make a meaningful clinical impact. For life-threatening infections such as multidrug-resistant TB, *Klebsiella pneumoniae* and *E. coli*, doctors are left with few or no treatment options. These superbugs often spread in hospitals and nursing homes, causing fatal infections.

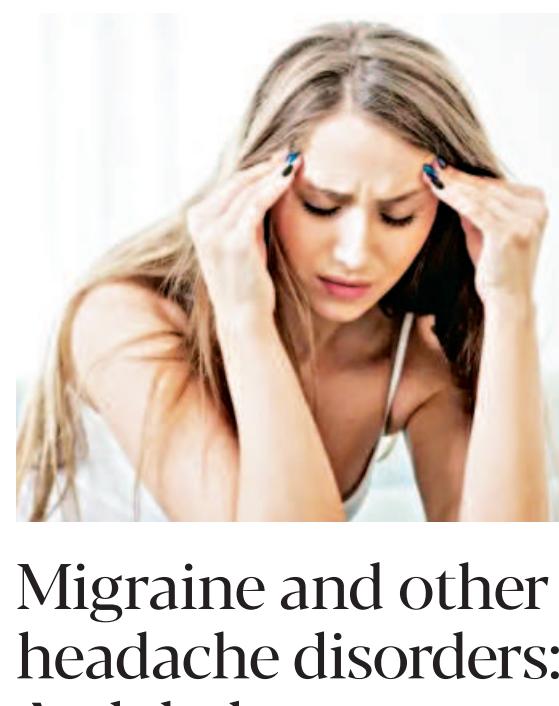
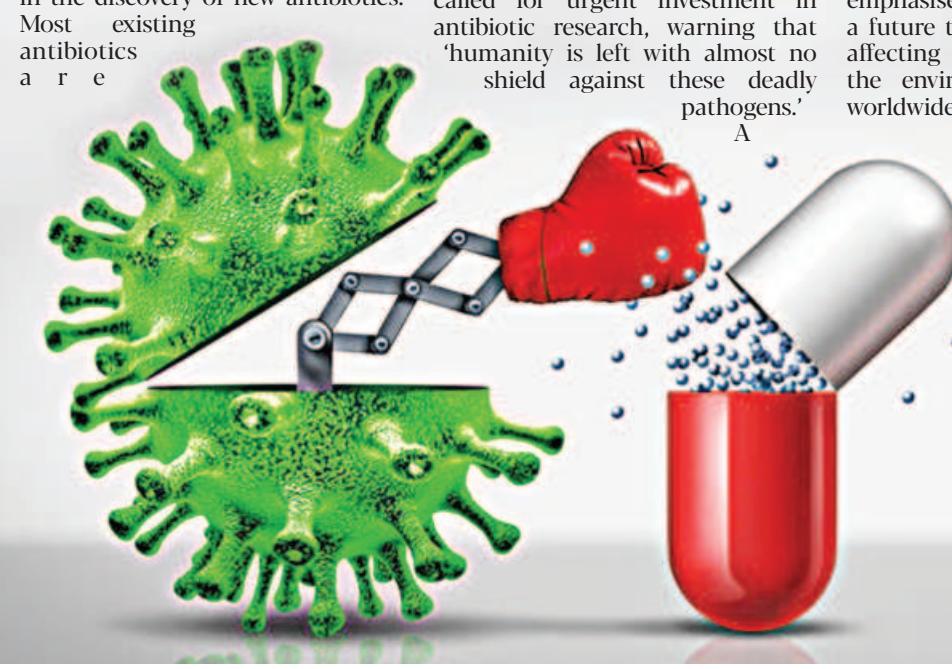
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recent *Lancet* article titled 'Antibiotic Resistance: Need for a Global Solution' underscored the magnitude of the crisis. Twenty-six leading scientists and clinicians warned that within two to three decades, humanity may return to a pre antibiotic era, where simple bacterial infections cause mass fatalities and routine surgeries become impossible. Despite global concern, little tangible progress has been made, especially in developing countries.

Developing a single antibiotic costs hundreds of millions of dollars, yet the return on investment is minimal. Patients use antibiotics for only a few days—unlike lifelong drugs for diabetes or hypertension. Moreover, when a new antibiotic quickly encounters resistance, the commercial incentive collapses. Regulatory hurdles add further delays. As a result, most companies have withdrawn from antibiotic research, leaving patients vulnerable and resistant bacteria triumphant.

In this context, World Antimicrobial Resistance (AMR) Awareness Week 2025, held from 18 to 24 November 2025, carried particular urgency. The 2025 theme—"Act Now: Protect Our Present, Secure Our Future"—emphasises that AMR is not merely a future threat but a current crisis affecting health, food systems, the environment and economies worldwide.

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Migraine and other headache disorders: A global concern

STAR HEALTH DESK

Headache disorders remained among the most common neurological conditions worldwide, affecting an estimated 40% of the global population in 2021. Despite their widespread impact, they continued to be underestimated and under-treated, leading to significant personal suffering, reduced quality of life and substantial economic loss.

Migraine alone ranked as the third highest cause of disability-adjusted life years globally, after stroke and neonatal encephalopathy. Many people live with recurring headaches without proper diagnosis or treatment, contributing to avoidable disability and productivity loss.

Types of headache disorders: Several headache disorders were recognised as major public health concerns due to their disabling nature:

- **Migraine:** recurrent attacks lasting 4–72 hours, often with nausea, vomiting and sensitivity to light and sound.

- **Tension-type headache:** pressure or tightness around the head, often linked with stress or neck strain.

- **Cluster headache:** extremely severe pain around one eye, occurring several times a day with tearing and nasal symptoms.

- **Medication-overuse headache:** caused by frequent use of pain medicines, leading to persistent daily headaches.

Treatment and management

Effective management requires better training for healthcare providers to accurately diagnose and distinguish headache types.

Cost-effective treatments include analgesics, anti-emetics, specific anti-migraine medicines and preventive drugs.

Lifestyle measures—regular sleep, hydration, exercise, a healthy diet, avoiding triggers such as alcohol, and using a headache calendar—are essential.

Educating patients on medication overuse helps prevent chronic symptoms.

SOURCE: WORLD HEALTH ORGANISATION

LUNG CANCER No longer just a smoker's disease!

PROF DR DABASHISH PATOMWARY

Lung cancer is no longer just a smoker's disease. In Bangladesh, alongside smoking and negligence, factors such as air pollution, radon gas, genetic mutations, and industrial emissions from workplaces are increasingly contributing to its risk. Research shows that although smoking remains a major cause of lung cancer among patients in Bangladesh, cases of adenocarcinoma—a particular type—are rising even among people who have never smoked.

Be alert—do not ignore these warning signs: persistent cough, coughing up blood, chest pain or shortness of breath, unexplained weight loss, or unusual fatigue. Early diagnosis ensures better treatment outcomes and increases the chance of survival.

Preventive strategies are the need of the time. Quit smoking completely and maintain a smoke-free environment both indoors and outdoors. Air pollution levels are dangerously high in urban areas; take initiatives to ensure clean air and support government actions to reduce pollution.

Undergo regular screening and medical check-ups, especially if you are above 40 or have a present or past history of smoking. Make a conscious decision for yourself and your loved ones—quit smoking today, ensure a clean air environment, and prioritise routine health screenings.

Together, prevention is not just possible, but we can ensure a healthier and longer life!

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