What may signal mental exhaustion and what you can do about it

Mental exhaustion is similar to physical tiredness, except it affects the mind. Intense mental attention on a difficult task tends to trigger it. If you are always on edge or stressed, you may have a brain drain. Job, kids, parents, and other duties can cause mental weariness.

STAR HEALTH DESK

Your hair-trigger temper or inability to concentrate may be signs of a larger problem. See what else may signal mental exhaustion and what you can do about it.

• **You are angry or impatient:** Mental fatigue can put you in a bad mood. You may be short-tempered or irritated, snapping at people more often.

• **You cannot get work done:** Everyone's productivity varies. But mental fatigue can impair concentration. It demotivates and distracts you. Even simple things can be daunting.

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• **You zone out:** Mind-wandering or tiredness can be symptoms. It is hard to focus and respond quickly. In certain situations, like driving, this can be harmful.

• **You do not sleep well:** It may seem simpler to sleep when your brain is tired. But not usually. People with high "cognitive workload" jobs report higher sleeplessness symptoms than those who do not. Stress can exacerbate mental tiredness. Are you not sleeping or feeling tired? Tell your doctor. Treatment helps.

• **Unhealthy habits:** You may start drinking or using drugs excessively. Mental exhaustion can be much more difficult for people with addictions. Drug addiction alters brain

regions that help you cope with stress and control impulsive behaviour.

• **You are sad:** You may lack energy or feel tired. That can make finishing work or daily tasks difficult.

• **Lots of worries:** Mental exhaustion triggers the sympathetic nervous system. Anxiety is a warning that something is wrong. You might stress or worry if you are always mentally weary. This commonly occurs with depressive symptoms.

• **Exercise is more difficult: Mental tiredn**ess affects physical exercise, experts say. Some say your workout tolerance may fade. So, you may appear to be working harder than you are.

• **Food habits change:** Mental weariness can impact hunger in several ways. Some of you may consume more than usual and not pay attention. The stress hormone cortisol can cause food cravings. Or you might not be hungry.

• **You make mistakes:** Your work cannot always be perfect. A tired mind can't detect and correct errors quickly. That can pose major issues when operating machines, driving cars, or flying planes.

• **You feel more pain:** Mental weariness affects the body differently in each person. But you might have headaches, back discomfort, or gastrointestinal issues.

• **Take breaks:** Short breaks throughout long mental work sessions may help you feel less exhausted. There is no ideal amount of rest time for everyone. But you should recharge every 1-2 hours.

• **Get active:** Exercise during your breaks may help you feel more energised. Try a few minutes of jumping jacks and stretches. A 10–15-minute brisk walk.

• **Find relaxation:** Mental fatigue is difficult to prevent. You may train your body's natural relaxing reaction. Get a massage. Try meditating, yoga, or just watching a hilarious movie. If you need additional help, ask friends, family, or mental health professionals.

Untreated mental weariness can negatively affect your emotional and physical health, relationships with others, and quality of life.

Household air pollution delays early child development in under-5 years children in Bangladesh

About 250 million children under five years of age in low-income and middle-income countries, including Bangladesh, are at risk of not reaching their full developmental potential. A recent study on 9,395 Bangladeshi children aged 36–59 months published in the Journal of Epidemiology and Community Health by the British Medical Journal Group found that about 81% of children are exposed to household air pollution (HAP), and more than 25% children have delays in early child development (ECD).

Juwel Rana, Doctoral Researcher at the Faculty of Medicine and Health Sciences, McGill University and his colleagues conducted this study. The study suggests that HAP exposed children were 47% more likely to have developmental delays than children with no exposure. ECD was measured in four domains, and developmental delays were mostly in socioemotional and learning-cognition subdomains. The effects of HAP on ECD were stronger among boys and urban children though these associations were imprecise. The study recommends that public health policies should promote the use of clean cooking fuels and cookstoves to reduce HAP and help Bangladesh achieve sustainable development goals (SDGs) related to ECD and clean fuels by 2030.

Source: **BMJ Journals**

OSTEOPOROSIS

A silent killer of the bones

MD NAIM HOSSAIN

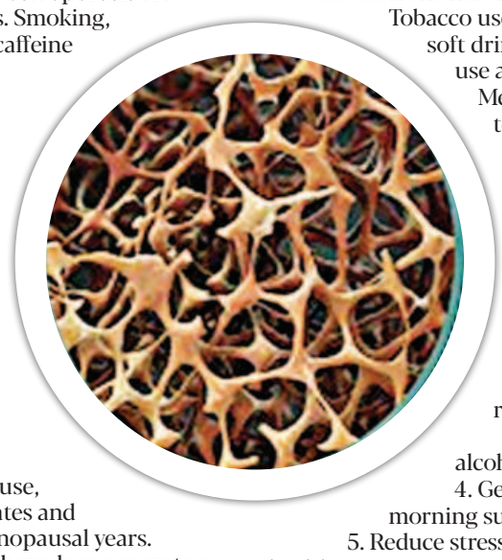
Due to decreased bone density and quality, osteoporosis caused skeletal weakening and increased fracture risk, notably the spine, wrist and hip. The first indication of this condition is a fracture, a major cause of death and morbidity.

Osteoporosis has several risk factors, some adjustable and some not. Female sex, age, thin build, and family history of osteoporosis are non-modifiable risk factors. Smoking, excessive alcohol use, and caffeine intake are all changeable factors.

Osteoporosis causes a fracture in one in three women and one in five men over 50. The International Osteoporosis Foundation estimates that 30-50% of women and 15-30% of men suffer an osteoporotic fracture.

Osteoporosis affects both men and women and can be prevented or treated. Following menopause, women's bone loss accelerates and continues into the postmenopausal years. Osteoporosis occurs when bone loss occurs too quickly, or bone growth develops too slowly. Osteoporosis develops if your peak bone mass is not reached during your bone-building years.

Osteoporosis is diagnosed with standard radiography and bone mineral density (BMD) testing. Dual-energy X-ray absorptiometry is the most used approach. The causes of osteoporosis are well known. Less estrogen after menopause or surgical removal of the ovaries is associated with a rapid loss of bone mineral density, while less testosterone has the same impact in males.



Following menopause, women's bone loss accelerates and continues into the postmenopausal years. Osteoporosis occurs when bone loss occurs too quickly, or bone growth develops too slowly.

Tobacco use, malnutrition, inactivity, soft drinks, and excessive alcohol use are modifiable risk factors. Medications have been linked to an increased risk of osteoporosis.

Five ways to keep bones healthy

1. Eat a well-balanced diet with plenty of dairy, fish, fruits, and vegetables.
2. Exercise regularly to reduce bone loss and retain calcium in the bones.
3. Avoid smoking and limit alcohol.
4. Get vitamin D from the early morning sunlight.
5. Reduce stress which is crucial to bone health

Osteoporosis should be treated with medications and lifestyle, nutrition, and exercise guidance. Getting enough calcium and vitamin D, plus supplements if needed, may help minimise the risk of osteoporosis.

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Artificial sweeteners may not be safe sugar alternatives

Artificial sweeteners lower the amount of added sugar and calories while preserving sweetness. According to a recent study published in PLOS Medicine, some artificial sweeteners are linked to higher cancer risk.

Millions of individuals eat artificial sweetener-containing food and beverages daily. However, the safety of these additions has been questioned. Researchers examined data from 102,865 French adults who took part in the NutriNet-Santé trial to assess the potential carcinogenicity of artificial sweeteners. Researchers gathered information about artificial sweetener consumption from 24-hour dietary records.

The researchers discovered that enrollees who consumed more artificial sweeteners, particularly aspartame and acesulfame-K, had a greater risk of overall cancer than non-consumers. Breast cancer and obesity-related cancers were shown to have higher risks.

Our findings do not support the use of artificial sweeteners as safe sugar substitutes in foods or beverages," the authors opined. While needing to be reproduced in larger cohorts and experimentally explained, these findings are significant.

Source: **PLOS Medicine**

Teen internet usage associated with stress and suicidal ideation

Unsurprisingly, teenagers who spend more time online had higher levels of stress, depression, and suicide thoughts, according to a Korean study of over 30,000 high school students. The new study is published recently in the open-access journal PLOS ONE by Yeunhee Kwak of Chung-Ang University, Korea, and colleagues.

The researchers used data from the 2018 Korea Youth Risk Behaviour Web-Based Survey to assess 29,811 high school students aged 16 to 18. There was also data on non-academic Internet use, mental health, and general student characteristics.

The study shows students spent an average of 193.4 minutes per day surfing the internet for non-academic purposes. Internet usage was highest among lower-grade students, females, low-income families, and students with low academic success. Students with lower internet usage reported better health, reduced feelings of sadness, and less suicidal ideation than the group with high Internet usage.

While the findings cannot demonstrate any causative link between Internet usage and mental health, the authors believe that active support and interventions are needed to reduce feelings of stress and sadness in adolescents and that programmes that promote healthy use of the internet, replace Internet use with social and physical activities, and help adolescents maintain good relationships could play a role.

Source: **PLOS ONE**