

# Ten threats to global health in 2019

## STAR HEALTH DESK

The world is facing multiple health challenges. These range from outbreaks of vaccine-preventable diseases like measles and diphtheria, increasing reports of drug-resistant pathogens, growing rates of obesity and physical inactivity to the health impacts of environmental pollution and climate change and multiple humanitarian crises. Here are 10 of the many issues that will demand attention from World Health Organisation (WHO) and health partners in 2019.

**Air pollution and climate change**  
Microscopic pollutants in the air can penetrate respiratory and circulatory systems, damaging the lungs, heart and brain, killing 7 million people prematurely every year from diseases such as cancer, stroke, heart and lung disease. Around 90% of these deaths are in low- and middle-income countries, with high volumes of emissions from industry, transport and agriculture, as well as dirty cookstoves and fuels in homes.

**Non-communicable diseases**  
Non-communicable diseases, such as diabetes, cancer and heart disease, are collectively responsible for over 70% of all deaths worldwide, or 41 million people. The rise of these diseases has been driven by five major risk factors: tobacco use, physical inactivity, the harmful use of alcohol, unhealthy diets and air pollution.

**Global influenza pandemic**  
The world will face another influenza pandemic – the only thing we do not know is when it will hit and how severe it will be. Global defences are only as effective as the weakest link in any country's health emergency preparedness and response system.

**Fragile and vulnerable settings**  
More than 1.6 billion people live in places



where protracted crises (through a combination of challenges such as drought, famine, conflict, and population displacement) and weak health services leave them without access to basic care. Fragile settings exist in almost all regions of the world, and these are where half of the key targets in the sustainable development goals, including on child and maternal health, remains unmet.

**Antimicrobial resistance**

Antimicrobial resistance – the ability of bacteria, parasites, viruses and fungi to resist medicines – threatens to send us back to a time when we were unable to easily treat infections such as pneumonia, tuberculosis, gonorrhoea, and

salmonellosis. Drug resistance is driven by the overuse of antimicrobials in people, but also in animals, especially those used for food production, as well as in the environment.

**Ebola and other high-threat pathogens**  
In 2018, the Democratic Republic of the Congo saw two separate Ebola outbreaks, both of which spread to cities of more than 1 million people. This shows that the context in which an epidemic of a high-threat pathogen like Ebola erupts is critical.

**Weak primary health care**

Primary health care is usually the first point of contact people have with their health care system, and ideally should

provide comprehensive, affordable, community-based care throughout life. Yet many countries do not have adequate primary health care facilities. This neglect may be a lack of resources in low- or middle-income countries, but possibly also a focus in the past few decades on single disease programmes.

**Vaccine hesitancy**

Vaccine hesitancy – the reluctance or refusal to vaccinate despite the availability of vaccines – threatens to reverse progress made in tackling vaccine-preventable diseases. Vaccination is one of the most cost-effective ways of avoiding disease – it currently prevents 2-3 million deaths a year, and a further 1.5 million could be avoided if global coverage of vaccinations improved.

**Dengue**

Dengue, a mosquito-borne disease that causes flu-like symptoms and can be lethal and kill up to 20% of those with severe dengue, has been a growing threat for decades. Now, its season in these countries is lengthening significantly (in 2018, Bangladesh saw the highest number of deaths in almost two decades), and the disease is spreading to less tropical and more temperate countries such as Nepal, that have not traditionally seen the disease.

**HIV**

The progress made against HIV has been enormous in terms of getting people tested, providing them with antiretrovirals, and providing access to preventive measures such as a pre-exposure prophylaxis (PrEP), which is when people at risk of HIV take antiretrovirals to prevent infection. Since the beginning of the epidemic about 35 million people have died.

Source : World Health Organisation

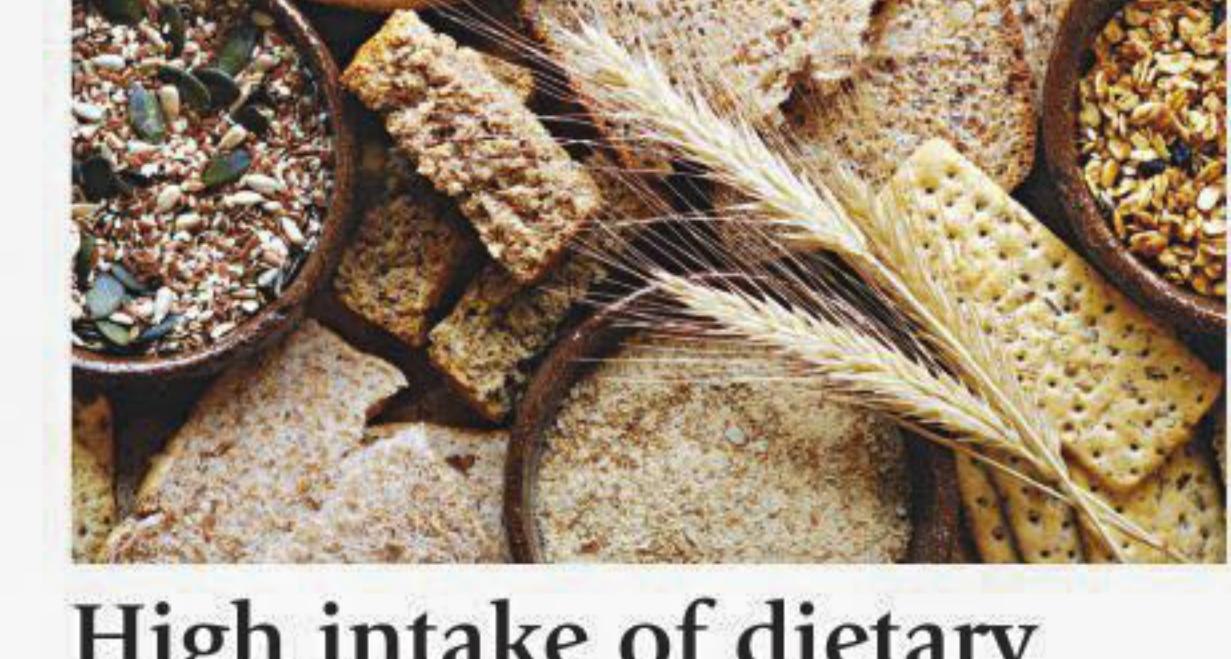
## SLEEPING HABIT

## School performance improves when adolescents sleep longer

Adolescents often do not receive the 8 to 10 hours of sleep recommended by the American Academy of Paediatrics due to both late sleep-start and early arousal to attend school. In 2016, the Seattle public schools decided to delay the start time of secondary schools from 7:50 to 8:45 a.m. To examine the effect of that policy change on sleep patterns, sleepiness, grades, and school attendance, investigators compared these measures at the same time of the year both pre- and post-policy change. Participants were sophomore students attending science classes in two public high schools. Sleep duration and light exposure were measured with sleep-wake activity wrist monitors. Results were as follows:

- Following the later start time, median sleep duration increased from 6 hours and 50 minutes to 7 hours and 24 minutes (+34 minutes) during school days ( $P<0.001$ ) but was not different on non-school days.
- The effect of oversleeping on non-school days secondarily affecting sleep on school days (i.e., social jet lag) was examined and found to be lessened after implementing the later school start time.
- Exposure to light pre- and post-sleep was similar on non-school days but was later in the mornings on school days following the policy change.
- Later school start time was associated with less sleepiness and improved grades.
- Later school time was associated with fewer school absences and tardiness episodes in the high school with the greater proportions of disadvantaged and ethnic minority students but not in the other school.

## HEALTH bulletin



### High intake of dietary fibre and whole grains associated with reduced risk of NCDs

Observational studies and clinical trials conducted over nearly 40 years reveal the health benefits of eating at least 25g to 29g or more of dietary fibre a day, according to a series of systematic reviews and meta-analyses published in *The Lancet*.

The results suggest a 15-30% decrease in all-cause and cardiovascular related mortality when comparing people who eat the highest amount of fibre to those who eat the least. Eating fibre-rich foods also reduced incidence of coronary heart disease, stroke, type 2 diabetes and colorectal cancer by 16-24%. Per 1,000 participants, the impact translates into 13 fewer deaths and six fewer cases of coronary heart disease.

In addition, a meta-analysis of clinical trials suggested that increasing fibre intakes was associated with lower bodyweight and cholesterol, compared with lower intakes.

The study was commissioned by the World Health Organisation to inform the development of new recommendations for optimal daily fibre intake and to determine which types of carbohydrate provide the best protection against non-communicable diseases (NCDs) and weight gain.

## Safe, healthy and fit in winter

## FAHMIDA HASHEM

It may be cold outside, but winter need not be the unhealthiest time of year for you and your family. Many people feel tired and sluggish during winter. This is due to the lack of sunlight, which disrupts our sleep and waking cycles. When it is cold and dark outside, it can be tempting to fill up on unhealthy comfort food. However, it is important to ensure you still have a healthy diet and include five portions of fruit and vegetable a day.

Carrot is a crunchy power food which contains vitamin A, B, B2, B3, C, D, E and K. Green peas are one of the most nutritious leguminous vegetables rich in health benefiting phytonutrients, minerals, vitamins and antioxidants. Cabbage has lots of vitamins and minerals, including folate and vitamins C and K. Cauliflower has plenty of other nutrients including vitamin C, folate, dietary fibre and omega-3 fatty acids. As you can see, there are so many ways to eat healthy mineral-rich vegetables in winter.

Colder temperatures that keep us indoors can result in body taking in less vitamin D than it receives during the summer, which is generated in our bodies via sunlight. For this reason, you need to ensure that your family receives enough vitamin D during the winter. Sources of vitamin D include fortified milk and other dairy products, eggs especially the yolks and fatty fish.

To chase away chills, replenish depleted glycogen stores, and rehydrate our body, enjoy warm



carbohydrates with a little protein, such as hot cocoa made with milk, oatmeal with nuts, vegetable and chicken soup and lentil soup. The warm food, added to the thermogenic effect of eating, contributes to rapid winter recovery.

Our skin is an outside indicator for our internal health. Poor nutrition can lead to dry skin, eczema, psoriasis, scarring, acne breakouts, inflammation and pale or ashy skin tones. Eating a varied and balanced diet of whole foods consisting of 40-60% complex carbohydrates, 20-30% lean protein and 10-20% mono- and polyunsaturated fats will give our skin most of what it needs to run efficiently, but occasionally supplementation is needed.

The fruit and vegetables will provide the three most important nutrients for healthy skin: water, trace minerals, and antioxidants. Vitamin

A deficiencies are characterised by dry, bumpy skin on the back of the arms, neck and back. Deficiencies of vitamin C result in tendency to bruise, sagging skin, and slowed healing. Iodine also prevents rough skin from developing and prevents premature ageing. Silicon is important in the fight against ageing because it aids in collagen formation. Zinc helps control the oil content of the skin and reduces acne. Omega-6 fatty acids promote healthy and moisturised skin.

When the temperature drops and winter arrives it is important to ensure that everyone in the family continues to eat healthfully. By following the mentioned nutrition tips you can keep your family fit and healthy while boosting your immune systems.

The writer is a nutritionist.

## Papaya leaf tea benefits

The papaya plant bears a versatile fruit that is eaten both ripe and unripe. Young papaya leaves are eaten like a vegetable in some cuisines, and papaya leaf tea has a variety of purported medicinal effects.

**Cancer**

Papaya leaf tea might prove effective as a cancer preventative and treatment, according to a study published in the "Journal of Ethnopharmacology." The researchers said that the results of their preliminary study indicate the immune-modulating properties of papaya leaf tea may prove to be useful in treatment and prevention of diseases, including cancer, allergies and as a component in some vaccines.

**Ulcer**

Papaya leaf tea protected against gastric ulcer in a study on laboratory animals published in the "West Indian Medical Journal." In the study, papaya leaf extract reduced ulcer severity and showed strong antioxidant effects. Researchers concluded from this preliminary study that papaya leaf tea shows potential for the treatment of gastric ulcer and oxidative stress on the stomach.

**Gluten digestion**

The enzyme papain in papaya leaves assists in the digestion of proteins and is useful for treating gastrointestinal disorders. Papaya leaf tea can alleviate heartburn discomfort and is an appetite stimulant. Papaya leaf tea may also help digest the wheat protein gluten, which is difficult for some people to digest and causes an autoimmune condition known as coeliac disease. This area still needs more research, so people with coeliac disease should not use papaya leaves to treat their condition.

**Caution**

The enzyme papain in papaya leaf has been known to cause allergic reactions in some people, according to a study published in the journal "Ugeskrift for Laeger." The report documented a breakout of allergic symptoms in 10 out of 22 employees at a research laboratory who were exposed to papain dust. The workers developed symptoms of itchy eyes and runny nose. Improved hygienic conditions and proper ventilation solved the problem.



## Reasons You May Have Brain Fog

### What Is It ?

"Brain fog" isn't a medical condition. It's a term used for certain symptoms that can affect your ability to think. You may feel confused or disorganized or find it hard to focus or put your thoughts into words.

#### Pregnancy

Many women find it's harder to remember things during pregnancy. Carrying a baby can change your body in lots of ways, and chemicals released to protect and nourish your baby may bring on memory problems.

#### Multiple Sclerosis (MS)

This disease affects your central nervous system and can change the way your brain "talks" to the rest of your body.

About half the people who have MS have issues with memory, attention, planning, or language. Learning and memory exercises can help, and a therapist can give you new ways to handle the tasks you have trouble with.

#### Medication

Some kinds of drugs -- over-the-counter and prescribed -- can cause brain fog. If you take medicine and notice that your thinking isn't as clear as it should be or you suddenly can't remember things, call your doctor. Be sure to let him know all the medications you take.

#### Cancer Treatment

Chemotherapy -- a treatment for cancer that uses strong drugs -- can lead to what's sometimes called "chemo brain." You may have trouble remembering details like names or dates, have a hard time multi-tasking, or take longer to finish things. It usually goes away fairly quickly, but some people can be affected for a long time after treatment.

#### Depression

You may not remember things well or be able to think through problems easily. It's hard to know if this is linked to the loss of energy and motivation that comes with depression, or if depression affects your brain in a way that causes the fog. Treatment for your depression, which includes medication and talk therapy, should help get you back on track.

#### Sleep

You need sleep to help your brain work the way it should, but too much can make you feel foggy, too. Aim for 7 to 9 hours. To get good rest at bedtime, you may want to avoid caffeine and alcohol after lunch and keep the computer and smartphone out of your bedroom. It also can help to get to bed and wake up at the same time every day.



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