Benefits of brisk walking for diabetic patients

DR NUR-A-SAFRINA RAHMAN

For people with diabetes, walking is a great way to get some exercise that is both simple and effective. But we all share the belief that regular, anytime walking is beneficial for managing diabetes. However, recent studies have suggested that brisk walking may have more health benefits than walking at a normal pace.

What is brisk walking?
Physical activity that involves walking at a pace that is faster than a leisurely walk and raises the heart rate is called brisk walking. A good way to determine if you're walking at a brisk pace is to count 100 steps per minute and check if you can still talk, but not sing, during the walk.

Following are some guidelines for a brisk walk:

Warm up: Start with a 5–10-minute warm-up walk to gradually increase your heart rate and prepare your body for exercise.



Swing your arms: Swing your arms naturally to help increase your speed and use more energy.

Focus on posture: Keep your head up, relax shoulders, and maintain a straight posture to help you walk more efficiently.

Schedule your time: Identify a certain time each day and stick to it consistently.

Track your progress: Aim to walk for 30 minutes or more on most days of the week, gradually increasing the duration and intensity as you get more comfortable.

Brisk walking can treat diabetes better than regular walking for numerous reasons:

- It increases heart rate and blood flow, which improves insulin sensitivity and blood sugar control.
- Burns more calories than ordinary walking, which helps manage diabetes by keeping a healthy weight.
- Lowers blood pressure and cholesterol, lowering the risk of heart disease.

It is crucial to note that everyone's fitness level, health state, and medical problems will determine the appropriate type and intensity of exercise. Create a customised fitness plan with a doctor to manage your diabetes.

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Polymerase chain reaction (PCR) machines are cost-effective and highly efficient tools used to amplify small segments of DNA or RNA that are selected from the genome using a primer.

The DNA lab at Bangladesh Shishu Hospital & Institute needs to be operational soon

PROF WAQAR A KHAN

Thalassemia is the most common congenital disorder in Bangladesh. It is estimated that nearly 14,000 children with thalassemia are born every year in our country. Ten percent of our population are carriers of the disease, while in the tribal population more than 30% are carriers.

Children suffering from thalassemia especially thalassemia major and severe types of Hb E beta-thalassemia patients, require regular blood transfusions, some within fifteen days and others every month. Regular transfusion of blood leads to an increase in the content of iron in the blood, which is toxic and collects in the major organs of the body like liver, endocrine glands, etc., leading to their failure to function. To remove the iron, one has to be treated with drugs.

These drugs are expensive and not affordable by the majority of our patients. Most of these patients die early. The psychological and financial strain are tremendous.

Prenatal diagnosis prevents the birth of thalassemic children. It is the best solution to eliminate the disease. However, efforts to prevent the birth of thalassemic children by creating awareness, discouraging marriage between carriers or identify carrier couples before marriage, and offering counselling to separate have had limited success in Iran and other countries.

Prenatal diagnosis and abortion of affected foetuses have been most effective in preventing the birth of thalassemic children as seen in many countries of the world, like Cyprus, Greece, and Iran (after the introduction of prenatal procedure). Prenatal diagnosis is the only way to know before birth whether the foetus has thalassemia or not, and abortion is advised if the foetus has thalassemia, but the final decision is with the parents to make a choice.

Bangladesh Shishu Hospital had a DNA lab for prenatal diagnosis of mothers where both the couples were carriers and abortion was advised if the foetus tested positive for thalassemic.

Unfortunately, as the machines are out of order, DNA analysis as a prenatal diagnosis procedure has stopped for the last one year (the lab was established about five years ago).

Earlier, a total of three hundred prenatal procedures were done. Couples were getting aware of this procedure and its use was increasing, particularly among parents having thalassemic children.

This has affected many poor couples who cannot afford the cost of a private lab. The service needs to be reinstated at the tertiary institute like Bangladesh Shishu Hospital & Institute soon for the prevention of thalassemia in Bangladesh.

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HAVE A NICE DAY

Is gratitude really powerful?

DR RUBAIUL MURSHED



'Ingratitude dries up the fountain of all goodness,' - said a French statesman. In reality, sometimes ingratitude can be more dreadful than revenge. That is why it is said that gratitude is the best attitude, because it helps us feel happier and more kind to others. But is gratitude really powerful? Indeed, the importance of attitude is the basis for everything in our lives.

There are well-known studies on the neuroscience of gratitude and its effects on the brain. They found that the ventromedial prefrontal cortex of the brain controls gratitude, which is related to mental health. Gratitude increases dopamine and serotonin, the two crucial neurotransmitters responsible for our emotions in the brain, and improves our mood immediately, giving us positive feelings of pleasure and well-being from the inside. It helps people feel more happy and hopeful, deal nicely with adversity, and build strong relationships.

According to the Huntsman Mental Health Institute, gratitude has psychological (happier), physical (fitter), and social (better) benefits. It's not happiness that brings gratitude; it's gratitude that brings happiness. Gratitude is more than thanking others or ourselves, mother nature, or the Almighty; it acknowledges all living beings in any form and eventually can enlighten the mind and make us feel more content.

Many of us do not try to realise the advantages of a 'Grateful Mindset'. Our mixed (good and bad) technological advancements and too many materialistic senses of overwhelm frequently blind us to life's simple blisses and happiness. Gratitude boosts happiness. It is the spark that ignites a spirit of pleasure in our mind, that spreads to the body.

Happiness cannot be owned naturally, it needs to be developed and earned through the experience of living every day with 'giving, forgiving, and gratitude,'- all of which together can be termed as 'Kindness'.

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Development of health sector after independence of Bangladesh

PROF DR M U KABIR CHOWDHURY

Bangladesh is often cited globally for its success stories in the health sector. One example is family planning through fertility regulation. The first post-independence National Population Census of 1974 found that the total fertility rate (TFR) was 6.9 per women; after a decade, the TFR dropped from 3.3 births per woman in the 1990s to 2.3 in 2011. In 2019 the TFR in Bangladesh was said to be 2.

Bangladesh has developed an Expanded Programme on Immunisation (EPI) under which child population is vaccinated mainly against tuberculosis, diphtheria, pertussis, tetanus, hepatitis, Haemophilus influenza type B, poliomyelitis, pneumonia, and measles. Bangladesh received a UN award in 2010 for reducing the child mortality rate.

Bangladesh also improved in child nutrition during past few decades. Bangladesh has 111 Medical colleges which is praiseworthy development in medical education.

After liberation, our child mortality rate dropped from 221 deaths per 1,000 live-births in 1972 to 38 deaths per 1,000 live births in recent years according to a report by the Institute of Epidemiology, Disease Control and Research (IEDCR) in 2019. It has also shown impressive improvements in population health status by achieving United Nation's Millennium Development Goal (MDG) 4 by reducing child deaths before the 2015 target.

In the COVID-19 era, with the strong hand of the Govt. of Bangladesh, it has controlled the pandemic better than many other countries in terms of both affected sufferers with low death rates.

According to the World Health Organisation of quality healthcare ranking, Bangladesh ranked 88th, which is better than any of the SAARC countries.

But the healthcare system in the country still lacks availability, equality, and reliability, which should be brought to light and taken into accounts. The immediate need, however, is to improve the quality of healthcare in Bangladesh for all classes of citizens.

Because of low income and social stigma associated with visiting a doctor, poor and rural people are deprived of health care. Richer and urban people can reach health care services earlier and quicker because of better socioeconomic conditions. To overcome these discrepancies, we are badly in need of health insurance for all citizens of the country.

The Government of Bangladesh has a plan to introduce a public health card system along with a coalition with NGOs working in rural areas and vulnerable groups that would be inclusive of marginalised groups, enabling them to access community healthcare services.

The author recently received Mahatma Gandhi International Peace Award 2023 for special contribution to the Great War of Liberation and medical services.

Five billion people unprotected from trans-fat leading to heart disease



STAR HEALTH DESK

Five billion people globally remain unprotected from harmful trans-fat, a new status report from the World Health Organisation (WHO) has found, increasing their risk of heart disease and death.

Since WHO first called for the global elimination of industrially produced trans-fat in 2018 – with an elimination target set for 2023; population coverage of best-practice policies has increased almost six-fold. Forty-three countries have now implemented best-practice policies for tackling trans-fat in food, with 2.8 billion people protected globally.

Despite substantial progress, however, this still leaves 5 billion worldwide at risk from trans-fat's devastating health impacts with the global goal for its total elimination in 2023 remaining unattainable at this time.

Industrially produced trans-fat (also called industrially produced trans-fatty acids) is commonly found in packaged foods, baked goods, cooking oils and spreads. Trans-fat intake is responsible for up to 5,00,000 premature deaths from coronary heart disease each year around the world. Best-practices in trans-fat elimination policies follow specific criteria established by WHO and limit industrially produced trans-fat in all settings.

There are two best-practice policy alternatives: 1) mandatory national limit of 2 grams of industrially produced trans-fat per 100 grams of total fat in all foods; and 2) mandatory national ban on the production or use of partially hydrogenated oils (a major source of trans fat) as an ingredient in all foods.

In 2023, WHO recommends that countries focus on these four areas: adopting best-practice policy, monitoring and surveillance, healthy oil replacements and advocacy. WHO guidance has been developed to help countries make rapid advances in these areas.

