

Ultra-processed food linked to dilution of protein energy intake and overweight/obesity

New research presented at this year's International Congress on Obesity in Melbourne (the biennial congress of the World Obesity Federation) shows how increasing consumption of ultra-processed foods (UPFs) is associated with both dilution of protein consumption and increasing BMI and overweight/obesity.

The protein leverage hypothesis states that dietary protein dilution (meaning reduction of the proportion of energy contributed by protein in the diet) has contributed to the obesity epidemic. At the same time, in the past 20 years UPF consumption has risen from contributing 52% to 57% of total energy intake in the USA in adults.

Dividing the extent of consumption of UPF into five groups from the bottom 20% to the top 20% (quintiles) has been shown to be associated with increasing energy intakes and the dilution of energy provided by protein from 18.2% to 13.3% even though absolute protein intake remains consistent across the five groups. This new study compared these different methods of assessing 'unhealthy' foods with how they dilute protein energy intake, and their subsequent association with overweight/obesity.

The team used an approach called nutritional geometry, to detect complex nutritional associations in diets. It untangles the multi-dimensionality of diet as when one nutrient changes, other nutrients change as a consequence.

The researchers also analysed mean body mass index (BMI) related to the changes, excluding low energy reporters (participants who had very low energy intakes and were excluded to improve the estimates). BMI increased as consumption of processed/discretionary foods increased.

A reduced proportion of energy from protein increases total energy intake because several studies, including randomised controlled trials have now found that people consume a fixed target of protein each day.



WORLD OCCUPATIONAL THERAPY DAY 2022

Opportunity + Choice = Justice

RABEYA FERDOUS

Every year on October 27, World Occupational Therapy Day is observed. This year the theme was "Opportunity + Choice = Justice". As occupational therapists, we believe individuals have rights to get engaged in meaningful occupations that contribute positively to their own well-being.

Every person with different ability has the right to do their daily activities. We should have given them opportunities to do it. Then we need to replace them into their actual work according to their capabilities.

According to Wilcock & Townsend (2000), occupational justice is the right of every individual to be able to meet basic needs and to have equal opportunities and life chances to reach toward her or his potential.

When a person has disability that time s/he faces some limitations in her/his daily works. So, the employment level may decrease. In this situation, occupational therapists play a great role to increase a person's empowerment.

What functional problems may arise? Difficulty to perform in Activities of Daily Living (ADLs). ADL has three arenas:

- Self-care
- Productivity
- Leisure

Self-care: Self-care means own daily work like bathing, eating, grooming, cleaning, etc. People who have limitation in physical abilities they have difficulty to do their daily work. They are dependent to their family members.

Productivity: When a person is unable to do their daily works, s/he cannot continue job. Students have difficulty to continue their study. People's productive life may hamper in every step. Then they suffer from mental diseases like anxiety, depression, bipolar mood disorder, etc.

Leisure: Leisure is one type of relaxation. It fresh our body and mind. While, some people like to watch television, some like to listen to songs and some feel happy at gardening. Leisure may vary from person to person. People with disability cannot do their leisure activities due to physical problem.

What occupational therapist do? Mainly occupational therapists work for the patients' independence in their daily lives.

The primary goal of occupational

therapy is to rehabilitate the patients physically and psychologically. Occupational therapists work for increasing person's empowerment, motivation and hope which are very important to do their daily activities. Occupational therapists ensure the persons empower into their own occupations and help to fully participate to their office works.

Occupational therapists work for all ages who have difficulties. They play following role to rehabilitate the patients:

- Facilitating independence in ADL's like eating, dressing, grooming, etc.
- Increasing memory by cognitive retraining
- Increasing social skills
- Providing sensory integration therapy
- Working to improve children's development skill

Many occupational therapists are needed all over the country. Only a few are working in government hospitals. So, the government should increase the post of occupational therapists in every government hospital in all Districts.

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HAVE A NICE DAY

Underestimating swing moods

DR RUBAIUL MURSHED

Too often we misjudge the power of balancing our mindsets and emotions. If we do not have control over reactions including our mouth and counter wildly, we will not have control over our future, and we will let others control us.

Well, it is normal to have days when we feel sad and hopeless or when we are over the moon. But then, as long as our temperament does not affect our own life and especially the surroundings to an extreme degree, they are usually considered to be okay.

On the other hand, in some cases, rapid changes in behaviour can be related to mental health, hormones, substance use, or other health conditions. When mood shifts to mania or hypomania, one may feel euphoric, full of energy or unusually irritable. These mood swings can affect sleep, energy, judgment and the ability to think and behave clearly. The mental term for mood swings are often referred to as mood disorders.



If you have bipolar disorder, your emotions range from extremely happy to extremely sad. This disorder is also called manic depression or bipolar affective disorder. The term "bipolar" means "two poles," signifying the polar opposites of mania and depression. These extreme mood swings can be symptoms of other mental illnesses.

Although bipolar disorder is a lifelong condition, one can manage his/her mood swings and other symptoms by following a modern treatment plan.

In most cases, bipolar disorder is treated with medications and psychological counselling. Episodes of mood swings may occur rarely or multiple times a year. While most people will experience some emotional symptoms between episodes, some may not experience any. Bipolar is an illness, not a hopeless destination.

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Patients in lower-income countries receive less timely cancer diagnoses

STAR HEALTH REPORT

The time it takes a cancer patient to see a doctor, receive a diagnosis and begin treatment can vary greatly depending on the patient's location and the type of cancer, with individuals in lower-income countries taking up to four times longer to initiate care, according to a new study findings in the open access journal PLOS Medicine.

Cancer is a leading cause of death globally and timely diagnosis and treatment are essential for improving patient outcomes. To understand how the timing of cancer treatment varies across different cancer types and in high- and lower-income countries,



researchers reviewed the relevant scientific literature and performed a meta-analysis of 410 articles representing 68 countries and more than 5.5 million patients.

Specifically, they looked at three time intervals: from the first symptoms to visiting a doctor, from the first consultation to diagnosis, and from diagnosis to the start of

treatment.

In high-income countries, most patients saw a doctor within a month of experiencing symptoms, but in lower income countries, this interval was 1.5 to 4 times longer for almost all cancer types.

The new study highlights the extent of the global disparities in early cancer diagnosis and treatment. The researchers urge that efforts should be made to reduce the amount of time it takes patients in lower-income countries to receive care after experiencing symptoms.

These findings spotlight types of cancers where research on ways to provide earlier diagnosis and treatment may yield better outcomes for patients.



NINS and Novartis make breakthrough by applying gene therapy

STAR HEALTH REPORT

For the first time in Bangladesh, gene therapy has been applied to treat the chronic neurological disease Spinal Muscular Atrophy (SMA). The National Institute of Neurosciences & Hospital (NINS) has reached a new milestone by applying gene therapy to a child for the first time in Bangladesh to treat this congenital disease.

The gene therapy, curable and United States Food and Drug Administration (US FDA) approved, costs around BDT 22 crore for a single dose and has been provided free of charge by the multinational pharmaceutical company Novartis Bangladesh.

Spinal Muscular Atrophy (SMA) is a rare and complex congenital disease of the nervous system caused by genetic disorder. The muscles of children suffering

from this disease continue to weaken. As a result, the children cannot sit or stand. But they possess normal intelligence. Later, the affected children die due to respiratory complications. Every year, many children die in the world because of the lack of treatment for this disease.

This disease usually destroys the nerve cells of the spinal cord of children. As the nerve cells that control the muscles are damaged, the muscles become weak. The newborns suffering from this disease become very weak and gradually suffer from congenital heart disease.

The Global Managed Access Programme (GMAP) of Novartis is designed to provide a feasible pathway for patients. Under this, patients who fulfill the required eligibility are selected. Treatment is then completed in accordance with applicable local laws and

regulations.

A Bangladeshi child has been selected for this treatment under the afore-mentioned programme. As the drug is prepared by taking into account each patient's genetic characteristics and various other physical factors, which is a very complicated process, the treatment is very expensive. The medical cost of this gene therapy is unaffordable for the common people.

Through this humanitarian initiative of Novartis, new doors have opened up for treating patients of SMA in Bangladesh. So far, this medicine has been administered to 2,300 patients worldwide.

Novartis has been ensuring not only the treatment for the patients, but also making sure that the doctors of this country can use this gene therapy for their patients through proper training.

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