

Nutrition to prevent pregnancy complications

STAR HEALTH DESK

Under-nutrition and malnutrition in pregnancy period are the major problems in Bangladesh that threaten the health of both mother and their babies. Maintaining proper nutrition during pregnancy is specially considered to be of importance for the high prevalence of low birth weight, fetal growth retardation and perinatal death (death around birth period). Experts identified limited access to high quality foods, traditional food habits, food taboos and limited knowledge as the factors contribute to under-nutrition.

Certain significant research works show that a healthy protein rich diet packed with essential nutrients like calcium, magnesium, iron, folic acid, vitamin D etc. can prevent many pregnancy complications and enhance the growth of baby.

Many pregnant women are deficient in important nutrients. Iron is one of such commonest nutrient lacking in expecting mothers. Iron deficiency lead to anaemia (lack of haemoglobin in blood) which is a risk factor for pre-term delivery, subsequent low birth weight baby pushing mother and babies prone to various infections.

The recommended requirement is 30 mg of iron daily which is not usually met by diet alone during pregnancy. So, oral iron tablet is commonly recommended. It should be taken on an empty stomach. When more than 30 mg of iron is given to treat anaemia, it is suggested to also take approximately 15



mg of zinc and 2 mg of copper, since iron interferes with absorption and utilisation of these materials.

According to some studies, caffeine decreases the availability of certain nutrients, such as calcium, zinc and iron. Current recommendations, therefore, include limiting the consumption of caffeinated products.

Calcium is another important nutrient — not only for bone health, but also for the prevention of major pregnancy complications. Studies suggested that calcium may help dilate and relax blood vessels and play effective

role in preventing pregnancy induced hypertension. It cuts the risk of severe pregnancy complications like pre-eclampsia. More importantly, calcium is the main component of growing baby's tiny bones. The recommended level of calcium for pregnant women is 1,200 mg daily. For some women, it is difficult to reach this level by diet alone; therefore calcium supplements may be needed. Calcium supplements, if recommended, should be taken with meals.

Additionally, vitamin D may be necessary if sunlight exposure is minimal.

For vegetarians, the current recommendations also include a daily supplement of 2 mg of Vitamin B12.

Folic acid, another vital nutrient helps prevent neural tube defects (serious abnormalities of the brain and spinal cord) of the baby. Lack of folic acid increases the risk of pre-term delivery, low birth weight and poor fetal growth. Folic acid is supplied with diet and oral tablet supplement.

Caloric requirements during pregnancy have been estimated to be around an additional 300 calories per day. Recommendations

regarding sugar intake for pregnant women depend on weight gain and maternal blood glucose levels. A high sugar intake would not be advisable for women gaining more than the recommended weight or for those women who are having difficulty controlling normal blood glucose levels. High sugar intake in these women may result in increased maternal risk for complications associated with too much weight gain, diabetes, hypertension, premature delivery and a large baby.

For women who do not ordinarily consume an adequate diet or for those in high-risk categories (such as those carrying twins, heavy smokers and drug abusers) a prenatal vitamin supplement is recommended, beginning in the second trimester.

Tips for common pregnancy discomforts include avoidance of offending, spicy and fatty foods when nausea and heartburn occur. Frequent, small and blander meals are often better tolerated.

When constipation is a concern, increased consumption of whole grains, fruits, and vegetables is advisable, as well as increased fluid intake and physical activity.

The above mentioned information is just for the awareness of pregnant woman or couples planning for pregnancy shortly. Proper antenatal care is a must during pregnancy. Any drug should be administered consulting a registered physician to assess the overall health status of pregnant women.

REUTERS, Washington

Will a gene bring healthful blessings or the curse of disease? It may depend on whether it is inherited from mom or dad, researchers reported recently.

A team at Iceland's Decode Genetics Inc found mutations in five disease-related genes that only take effect if inherited from a certain parent.

One, a new gene associated with diabetes, protects from the disease if inherited from the mother but raises the risk if inherited from the father. Three other diabetes genes also varied in their effects, but less so, depending on which parent it came from, the researchers reported in the journal *Nature*.

"We could make this discovery because we are in the unique position of being able to distinguish what is inherited from the mother from what is inherited from the father," Kari Stefansson, chief executive officer of Decode, said in a statement.

They found a gene that slightly raised the risk of breast cancer when inherited from the father but had no effect, or perhaps was slightly protective, when inherited from the mother.

A gene associated with a slow-growing form of skin cancer called basal-cell carcinoma was far more dangerous when inherited from the father.

The researchers were struck the most by the newly discovered type-2 diabetes gene, a so-called single nucleotide polymorphism or SNP — a single-letter change in the genetic code.

"The impact of the type-2 diabetes variant is not only large, but unusual: if an individual inherits it from their father, the variant increases risk of diabetes by more than 30 percent compared to those who inherit the non diabetes-linked version," the researchers wrote.

"If inherited maternally, the variant lowers risk by more than 10 percent," they added.

Nearly one quarter of those studied have the highest risk combination of the versions of this SNP, putting them at a roughly 50 percent greater lifetime risk of diabetes than the quarter with the protective combination."

Source: *Nature*

Emergency contraception: A way to reduce abortion

SHAMEEM AKHTAR

A 30 year old woman Rupa Akhter (not a real name) is married for 10 years living in a village. She planned to complete the family with her existing 4 children. But all on a sudden, she became pregnant unintentionally and mistakenly that made her very upset. Like many women, it was a matter of embarrassment for her talking intervention in a hospital after consulting a physician. Six months latter, she went to a traditional birth attendant (locally known as Dai) who induced her abortion through inappropriate way. The result was very dreadful. She delivered a dead baby with retained placenta (which covers and protect the baby in womb). She died after few hours of reaching a Subdistrict (Thana) Health Complex due to severe bleeding and many others complications.

This is a very common scenario in Bangladesh where mothers are unnecessarily die as a result of unsafe abortion and suffer from various complications due to the lack of knowledge and dependency on traditional birth attendants. Emergency contraceptive pills (ECP) can play a major role in preventing unwanted pregnancy and thus reducing the risk of medical interventions like Menstrual Regulation (MR) and abortion.

According to the World Health Organisation (WHO), 14 percent maternal mortality is due to unsafe abortion out of total maternal mortality in Bangladesh. Reports of National Plan Parenthood Federation reveals that yearly more than 4 million women are pregnant in Bangladesh, but out of them 1.3 million are unwanted. More than 0.8 million of this pregnancies are terminated by unsafe abortion.

Each year, one-third of births in Bangladesh can be considered as



A girl worried about her unwanted pregnancy (left). Emergency Contraceptive Pill (right).

unplanned, 19 percent are mistimed and 14 percent are unwanted. Lack of emergency contraceptive use, low contraceptive continuation rates, method failure, high unmet need for contraceptives are some leading causes of unwanted pregnancies and abortions. Emergency contraception (EC) may occupy a unique position in the range of family planning methods currently available to women.

EC enables women to prevent pregnancies after they have an unprotected sexual intercourse. Thus, it averts unplanned and unintentional pregnancies, which in turn, reduces unsafe abortions. Emergency contraception therefore, is an element of reproductive health care services which contraceptive reproductive choice for women in a situation where they may have little control over their sexual lives.

In the national family planning programme, EC is now incorporated as one of the important family planning methods. However, many women cannot access the EC due to extreme low coverage, lack of aware-

ness of both health workers and target population. Only one brand of ECP named "Postinor-2" is available as emergency contraceptive pill in the government and NGO sector, but little is known about its acceptability, utilisation pattern. Providers' perception regarding the method is very limited.

In a study conducted by Bangladesh Institute of Research for Promotion of Essential and Reproductive Health and Technologies (BIRPERHT), 45 percent service providers opined that they have lack of awareness providing ECP in the country. Another study of the same organisation revealed extreme low level of awareness (only 8 percent) among the newly married couples.

WHO publication indicates that the use of ECP could reduce the induced abortion rate as much as 50 percent, which could directly reduce the maternal deaths. EC can be a valuable reproductive health care option for tumbling tragic deaths and other severe complications from unsafe abortion.

The writer is a researcher.

Rice bran oil makes healthier snacks

STAR HEALTH DESK

Snacks and junk foods prepared with traditional cooking oils have numerous bad impacts on our health, especially on our heart. Rice bran oil, relatively new edible oil can replace those oils or trans fats and make our foods healthier.

The oil contains vitamins, antioxidants, nutrients and is trans-fats free. It can help lower cholesterol, fight free radicals and have many good effects on health.

Rice bran oil is extracted from cereal germ and inner husk of rice. It is extremely light and has mild flavour. It is mostly suitable for high-temperature cooking methods such as stir frying and deep-frying.

Although it is not widely used in Bangladesh, the oil has become popular few years back as cooking oil in several Asian countries, including Japan and China. Recently, food and beverages major PepsiCo India has decided to transform its entire snacks portfolio into a healthier category by cutting down fat contents and increasing the nutrients.

According to a 2005 study published in American Journal of Clinical Nutrition, rice bran oil lowers cholesterol in healthy adults. Total cholesterol was significantly lower with consumption of diet containing rice bran oil than with consumption of the control diet. Moreover, with consumption of the rice bran oil diet, harmful LDL (bad) cholesterol decreased by 7 percent, whereas HDL (good) cholesterol was unchanged.

It contains almost all the essential fatty acids. Its non-fatty acid components too have beneficial health effects. It is naturally abundant in antioxidants such as tocopherol, oryzanol and tocotrienol that have ability to counter ageing by fighting free radicals. Oryzanol reduces the harmful chole-

sterol without reducing the good cholesterol. Tocotrienol, on the other hand, is powerful and vitamin E existing in nature. It is said to have an anti-cancer effect. It also contains Phytosterols, which are believed to lower the absorption of cholesterol.

Food products cooked in rice bran oil have bland oil taste, while other oils like Peanut incorporate its own distinct taste.

Snacks are necessary to keep energy levels up between meals and ensure that there is no energy slump as the day wears on. But the main concern now a days is the oil used to make it that is rich in saturated fats and trans-fats. These



Epilepsy care

If you or your near and dear one has epilepsy, there are things you can do at home to reduce the risk of an injury during a seizure.

The following suggestions will help you during the crisis:

- Make sure your home is well carpeted and padded underneath.
- Cover any sharp corners on furniture with padding.
- Always close fireplace screens when the fireplace (oven) is lit. People with epilepsy should avoid lighting a fire or carrying lit candles.
- When buying space heaters or any type of iron, look for appliances with an automatic turn-off function.
- Use chairs that have arms, making a fall less likely.

HEALTH TIPS



For back health, don't sit up straight

Straight-as-a-board upright posture that you may have been striving for in the interest of ergonomic correctness is not what it is cracked up to be, according to a research. The research was conducted at Woodend Hospital in Aberdeen, Scotland. The Scottish and Canadian team presented its findings to the Radiological Society of North America.

The scientists used advanced MRI (magnetic resonance imaging), taking measurements of spinal angles and disc height, and noting the movement of discs across the various positions. Volunteers were scanned as they sat upright, hunched forward or leaned back at an angle of 135 degrees.

The laid-back posture is better for preventing back problems than sitting up straight, the series of images revealed. Slouching forward is hardest on the spine, the images showed. Surprisingly, sitting bolt upright may also cause trouble, resulting in damage to discs in the lower part of the spine. The leaning-back position placed the least strain on discs, muscles and tendons, the researchers observed.