

## Coping with abdominal discomfort

TAREQ SALAHUDDIN

During Eid-ul-Adha domestic animals are sacrificed in large scale which makes the opportunity to take meat hugely. There are some people who love meat, consume enormously without thinking the consequence. As a result, within a few days after Eid they suffer from various type of abdominal discomfort. The most common problem is diarrhoea along with dyspepsia (impairment of power or function of digestion, usually applied to epigastric discomfort following meals), nausea, vomiting etc. These are very simple ailment

which you can manage at your home. But due to lack of knowledge and proper management some people suffer a lot and some of them even need hospitalisation.

### Symptoms

The common problems that arise from indiscriminate intake of meat during Eid are--

- Nausea
- Vomiting
- Dyspepsia
- Diarrhoea

### Effects

Nausea and vomiting causes severe discomfort if untreated. In some cases it disappears without

any treatment. But sometimes vomiting may cause huge amount of fluid loss. Dyspepsia may turn into diarrhoea in some cases. The ultimate result is fluid loss.

### Management

For nausea and vomiting, you can easily take anti-emetic drugs like promethazine or domperidone which are available in the market in various trade names. Domperidone also relieves from dyspepsia.

The ultimate fate is fluid loss. If this is extensive for the body, it causes significant effects. So the first and foremost duty is to replace the fluid by oral

rehydration saline (ORS) which is easily dispensable in the dispensaries. After vomiting and diarrhoea you should take sufficient amount of saline orally. In maximum cases ORS gives the optimum benefit. If the diarrhoea persists for prolong time it may be of viral, bacterial, protozoal or some other origin. Remember that ORS is not the curative treatment of diarrhoea. It is a supportive treatment which should be continued in any situation. So you should never stop ORS if diarrhoea does not stop within few days. Then you should consult a physician who may prescribe you antibiotic therapy for diarrhoea.



## HEALTH AND SCIENCE BULLETIN



### Arsenic contamination in Matlab, Bangladesh

Tube wells in Matlab, Bangladesh were identified and tested for arsenic. Arsenic mitigation options were offered to households using wells with elevated arsenic levels (>50µg/L). Of 13,734 functioning tube wells, 8,473 (62 per cent) had arsenic levels >50µg/L and 1,273 (9%) had levels >500 µg/L.

The most popular systems for arsenic removal were an activated alumina filter (Alcan) in the households and pond sand filters in the community.

Source: ICDDR,B



## Living with pacemaker

DR MD HABIBE MILLAT

The heart has its own electrical system, which causes the heart to beat and to control the heart rate. Special tissues, usually Sinoatrial (SA) nodes or natural pacemakers, create electrical signals in a normal heart and so the heart starts beating. However, the term 'pacemaker' is most commonly used in reference to an artificial electronic device that is implanted in the chest, during a minor surgical procedure, to regulate the rhythm of the heart. Pacemakers were first introduced in the 1960s.

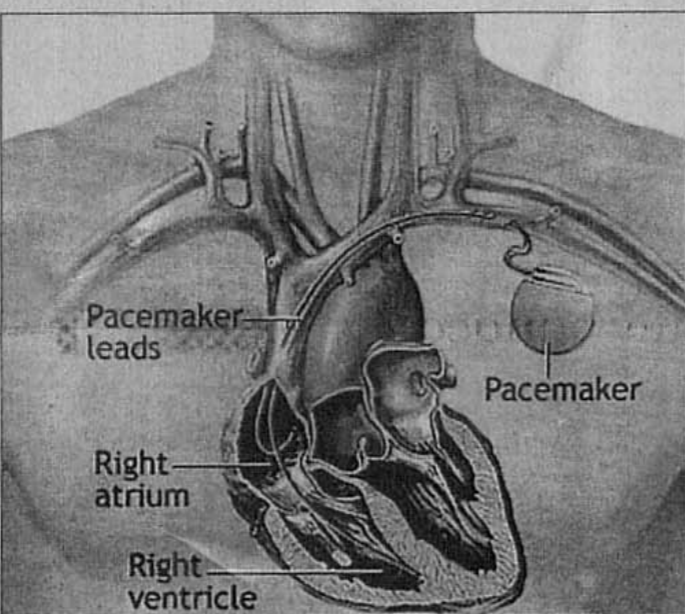
### Why pacemaker is needed?

The most common medical condition which requires a pacemaker is called 'Bradycardia' (abnormal slow heart beat). This means the heart rate is either too slow or too irregular to meet the demands of the body. Symptoms

of bradycardia may include dizziness, extreme fatigue, shortness of breath, or fainting spells. Pacemakers can relieve symptoms of these abnormal heart rhythms by sending electrical impulses to one or more chambers of the heart.

### What is a pacemaker?

A pacemaker is made of a battery and electronic circuitry sealed in a metal case. It consists of a generator, leads, and electrodes. The generator is a small box, usually about 2 inches wide and approximately 3 ounces in weight. Some generators are even smaller. They are battery-powered and these lithium batteries last for 5-10 years. When the battery runs out, the entire generator is replaced. Pacemaker batteries will not run out unexpectedly. Indeed, during a routine check-up, the physician can detect when the battery is



running out. Annually, over a quarter of a million pacemakers are

implanted worldwide. Indeed in Bangladesh a few hundred pacemakers are implanted annually.

The numbers of patients diagnosed as needing pacemakers is increasing in recent years.

### Attention to safety using a pacemaker

People who have pacemakers enjoy significant improvements in their quality of life. However, caution is advised in certain situations. Although the risk of life threatening problems is small, people with pacemakers should be aware of some important precautions and recommendations e.g. about electricity and magnets can be found in medical, home, workplace, and travel environments. People with pacemakers should avoid passing through a metal detector, or spending any length of time near store security gates or entrances, magnetic resonance imaging (MRI) machines, remote-control toys, amusement park rides and attractions, power plants, stereo

speakers or poorly shielded car engines. Patients with pacemakers should not hold a cell phone within 6 inches from the pacemaker at any time, even if the phone is turned off. Patients should discuss their concerns regarding these or other devices with their physicians.

It is the goal in most instances of cardiac pacing to restore as closely as possible the normal electrophysiological function of the electrical (conducting) system of the heart. Rapid advances in pacing technology will continue to have an impact on the quality of life of many patients with cardiovascular disease. At the present time, the developments of bradypacing (pacing for slow heart rate) have been shown to clearly prolong life and to improve the quality of that life.

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## DONATE BLOOD, SAVE LIFE



Donate blood, save life is old pronounced. But how far we are dedicated to donate blood? Are we conscious about the humanity? The answer is just a little bit. We can realise the fact when our near and dear one is about to die due to acute crisis of blood.

Every 4 months you have the opportunity to touch someone's life. The RBC (Red Blood Corpuscles) are produced from the bone marrow continuously and they have a life span of 120 days after which they are destroyed by the normal physiologic process of the body (by reticuloendothelial system). The formation and breakdown are continuous process. So an adult person can easily donate one bag of blood (350 ml) every four months. It does not cause any harm to his body.

**Eligibility to donate blood**  
• Age between 18 to 60

• Body weight not below 45 kg  
• Not suffering from anaemia, hepatitis, jaundice, TB, bleeding disorders, cardiac diseases, epilepsy, AIDS and other sexually transmitted diseases.

• Women are not eligible during menstruation, pregnancy and lactation.

### Benefit of blood donation

• If you donate blood to any blood bank, you will get a Donor's card which may help you further to get one bag of blood in need free of cost.  
• If you donate blood for the first time, you would be able to know your blood group without any charge.  
• If you donate blood in a blood bank, your blood will be screened for HbsAg (Hepatitis), VDRL (test for some sexually transmitted diseases).

So donate blood, save life. Give the gift of life to serve the humanity.



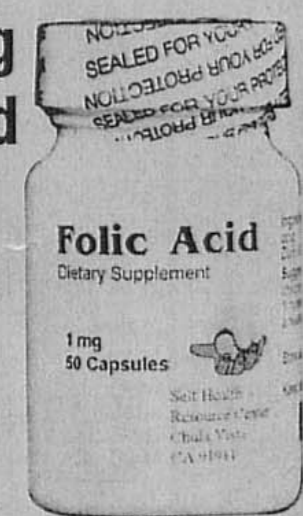
## Health tips

### Childbearing women need folic acid

Folic acid, also known as folate, is a B vitamin that's found in some enriched foods and vitamin pills. If women get enough of it before and during pregnancy, it can decrease the risk for neural tube birth defects.

It is recommended that all women who could become pregnant get 400 micrograms of folic acid daily. This could prevent up to 70 percent of neural tube birth defects. Regular intake of folic acid 400 micrograms daily for one month in early pregnancy is sufficient to prevent neural tube birth defects.

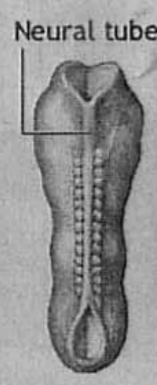
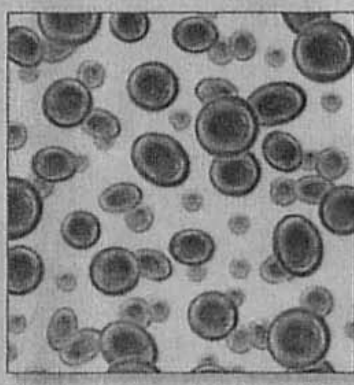
In our country women are on an average anaemic and



they badly need folic acid. In fact they lack from this vitamin and their children are born with the defects. This is a matter of great concern.

But to lower their risk, women of childbearing age need to get enough folic acid before they become pregnant -- even if they are not thinking about having a baby soon.

Folic acid is necessary for red blood cell production and neural tube formation



## Surprising effects of statins

Side effects are not always a bad thing. Statin drugs were developed to help lipid (blood fat) levels. They lower low-density lipoprotein (LDL) cholesterol levels. Because of these positive effects on blood lipids, statins have become the drug of choice for people with diabetes whose cholesterol levels are too high.

But research suggests that statins may also have useful side effects. They may reduce the chance of broken bones in older people and possibly the risk of dementia as well.

### Bones

Osteoporosis (loss of bone mass leading to fragile bones that break easily) is a serious problem in older people. Finding ways to stop or reverse bone loss would greatly help many people.

One small study of statins and bones in the March 2000 Journal of Clinical Endocrinology and Metabolism focused on people with diabetes. Researchers examined the hospital records of 69 Koreans with type 2 diabetes. About half took statins; the others (control subjects) had normal cholesterol levels. The two groups started the study with no difference in bone density. But after more than a year, women control subjects had lost bone from the spine. Meanwhile, men and women taking statins had increased the density of the upper end of the shaft of their thigh bones.

By contrast, the only other study with people with diabetes, reported in the Oct. 9, 2000, Archives of Internal Medicine, found lower bone density in 440 Japanese people with type 2 diabetes who took statins.

Several studies have been done in the general population. Some (but not all) did find that people taking statins had either better bone density or fewer broken bones. In these studies, other lipid-lowering drugs seemed not to have the same benefit.

### Dementia

Four recent research studies suggest that

people who take statins lower their risk of dementia.

An October 2000 study in Archives of Neurology looked at 57,000-plus hospital patients. Probable Alzheimer's disease was diagnosed significantly less often in statin users than in the others.

A November 2000 study in Lancet looked at 1,364 people 50 to 89 years old. People on statins had a significantly lower risk of getting dementia than people taking other lipid-lowering drugs or not taking any lipid drugs.

A February 2002 study in Archives of Neurology looked at 2,305 people 65 or older. People younger than 80 who took statins or any other lipid-lowering drugs were much less likely to get Alzheimer's or other forms of dementia.

A March 2002 study in Archives of Neurology looked at 1,037 post-menopausal women younger than 80 who had heart disease. The quarter of women with the highest total and LDL cholesterol levels were almost twice as likely to be cognitively impaired. Women taking statins were less likely than other subjects (but not significantly so) to develop dementia. Women taking other cholesterol drugs did not have a lower dementia risk.

The results suggest statins lower the risk of dementia, whereas other cholesterol drugs might not. But further studies are needed.

### ADA recommends

The Association recommends that all adults with diabetes be checked annually for lipid disorders. Goals are an LDL of less than 100 mg/dl, an HDL above 50 mg/dl, and triglycerides less than 150 mg/dl. If these goals are not met, lifestyle interventions (reduction of saturated fat and cholesterol intake, weight loss, increased exercise, and smoking cessation) should be initiated. If these fail, drug therapy should be considered.

Among those with diabetes over age 40, the Association recommends statin therapy for those whose total cholesterol is above 135

mg/dl.

### A new concern

Unfortunately, not all new research on statins has found such happy results. In a study published in the May 2002 Neurology, researchers looked at medical and prescription records of 166 people likely to have peripheral polyneuropathy (damage to multiple nerves outside the brain and spinal cord) of no known cause. (In other words, the polyneuropathy was not caused by diabetes or some other known condition.) For each patient the researchers chose 25 people of the same sex and age, but without polyneuropathy, for comparison.

The researchers found that 5.4 per cent of the people likely to have polyneuropathy were taking statins versus only 1.2 per cent of those without polyneuropathy (the control group). Those with definite polyneuropathy were found to be 16 times as likely to be taking statins as those who did not have nerve disease (the control group). The researchers concluded that long-term use of statins may substantially increase the risk of polyneuropathy.

Even so, the researchers concluded statins' benefits far outweigh the risk of neuropathy.

Despite their many benefits, statins are not risk-free. They can also interact with several other drugs and can cause neuropathy and other side effects.

### Conclusions

Statin are already the first-choice drugs to use in people with diabetes who have high LDL cholesterol. The new studies show that statins likely have additional benefits that far outweigh their risks, strengthening their position as a first-choice drug.