

Be aware of water & food borne diseases

PROF DR TAHMINUR RAHMAN

The list of water and food borne diseases are tall. However some important ones are mentioned here which spread by water and food like amoebic and bacillary dysentery, cholera, typhoid and paratyphoid, gastroenteritis (inflammation of alimentary tract), Hepatitis A virus (HAV) and Hepatitis E virus (HEV), round worm, whip worm etc.

How the water and food borne diseases spread?

The above mentioned water and food borne diseases spread via contaminated water and food by the affected water and food handlers. People engaged in cutting, processing, cooking these food items do not follow simple hygiene procedure before preparation of the food. Water and other soft drinks, fruit juices prepared in different house hold places and in some large factories also do not maintain the minimum standards for preparation of these items. The patients take food and water from these installations and infected with these diseases.

Risks associated with these diseases

There are many health risks, social and financial implications of these water and food borne diseases.

If a patient develops diarrhoea, his electrolyte level is

down and if he is not administered with oral fluid replacement, his life may be in great danger. Diarrhoea and dysentery leads to huge loss of fluid, electrolytes, essential nutrients, vitamins, minerals etc. which are essential for normal development. Deficiency of these will lead to anemia, malnutrition, improper physical and mental growth and development. Administration of proper drugs prescribed by physician is vital for some cases, otherwise the disease may turn to chronic case and may cause increased morbidity in the patient.

Most of the acute dysenteries can be cured properly if diagnosed early and appropriate medicine is prescribed by physician. However, indiscriminate use of anti dysenteric drugs by pharmacy people, self, family members has led to the increased chronic dysentery in Bangladesh. Long term complications may develop in acute and chronic patients if not treated properly.

Typhoid and paratyphoid fevers are very serious disease and unless diagnosed promptly and treated properly the patient may develop serious complications which may even be fatal. Besides, the patient may go to chronic stage and may suffer from this diseases for long.

Jaundice due to HAV is common in children and due to HEV is common in adults. These

hepatitis are water and food borne unlike their other two counterparts like hepatitis B (HBV) and hepatitis C (HCV) which are transmitted by use of shared needles, blood transfusion, surgery, sexual contacts and with other body fluids like mucus, saliva etc.

How we can prevent these diseases?

Preventive measures are always better than curative measures. Simple following of hygiene and application of common sense is sufficient to reduce morbidity and mortality from these diseases.

Preventive measures includes—
a. Washing of hands with hand soap, soap, ashes after each use, before each meal.

b. Cutting of nail properly every week. This is a simple but very important measure to prevent water and food borne diseases.

c. Boiling of water, purification of water with purifying tablets, use of mineral water, supply of safe drinking water.

d. Avoid taking food from outside unhygienic hotels, restaurants, food courts, road side food shop. Try to take home made food as much as you can.

e. If at all anyone has to take food from outside hotel look for the cleanliness, hygienic preparation of food, proper food serving. Whether the food is covered

properly or not the hygiene of the bearers, cook, table boy etc.

f. Try to avoid coloured food, Junk food, Ice cream from outside unless you are very sure that these foods are prepared in a hygienic way.

g. Once you are suffering from these diseases go to the physician as early as possible, arrange early diagnosis and take appropriate medicine to combat.

h. Effective inspection by sanitary and food inspectors should be taken by appropriate authority and ensure that strict hygienic measure are taken to prepare food in different installations.

i. Avoid addition of coloring & flavoring agent, dyes, chemicals completely in the food.

j. Mobile courts should continue and monitor the adulteration drive programme time to time.

k. Media like Television, Radio, Newspaper should publish articles on different aspect of healthy food preparation and aware the people of different water and food borne diseases time to time.

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Being symptom free- is not being healthy

DR MINATI ADHIKARY

The World Health Organisation defines health as "a state of complete physical, mental, and social well-being and not merely an absence of disease or infirmity so that a person can lead a socially and economically productive life". Again health and disease lie in a continuum, and there is no single cut-off point. The lowest point on health-disease spectrum is death and the highest point corresponds to the positive health.

The state of positive health implies the notion of perfect functioning of the body and mind. It conceptualises health as a state in which every cell and every organ is functioning at optimum capacity and in perfect harmony with the rest of the body, in which the individual feels a sense of perfect well-being and of mastery over his environment, and in which the individual's capacities for participation in the society are optimal.

It is thus that human health fluctuates with in a range of health to various levels of functions and dysfunction like better health, freedom from sickness, unrecognised sickness, mild sickness, severe sickness, and finally the state of total dysfunction – the death. The transition from optimal health to ill health is often gradual, and where one state ends and the other begins is difficult to judge. The health of an individual is not static; it is a dynamic phenomenon and a process of continuous change, subject to frequent subtle variations. What is considered maximum health today may be minimum tomorrow. It implies that health is a state not to be attained once and for all, but ever to be renewed.

So the best healthcare is not

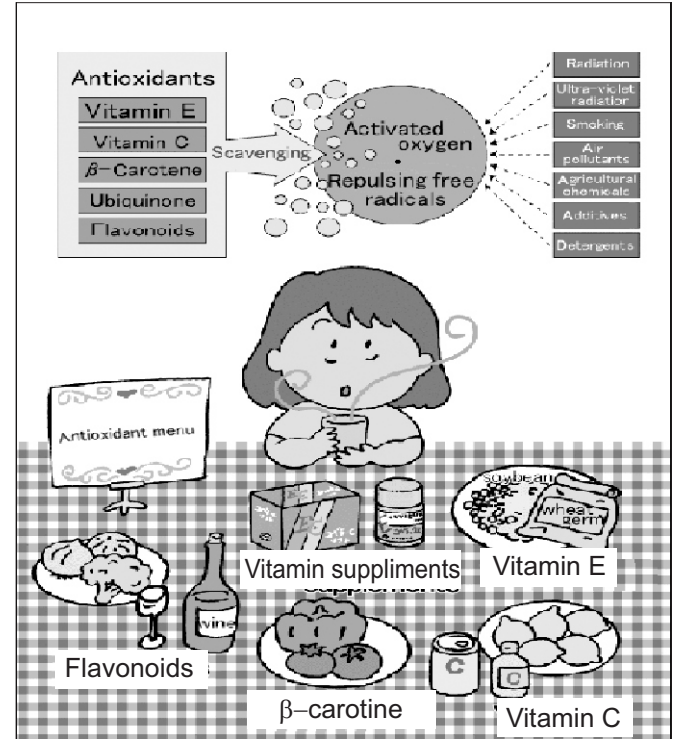
simply treating disease. There are many people who perceive themselves as healthy who are really quite ill. Being symptom free is not being healthy and having your symptoms treated or covered up does not necessarily treat the underlying disease. Your goal regardless of your disease state should be to optimise your health. Our bodies are constantly losing energy, restoration of this loss of energy is provided by the intake of oxygen, nutrients and water. All of us however, have blockades to the proper utilisation of these agents for the optimisation of our health, agents such as lead, mercury, arsenic, pesticides, dioxin, fungicides and many other toxins.

The lethality and damage caused by combined toxic metals are exponential, requiring much less of each to create greater harm. Your brain and heart are the most sensitive, but every living cell in your body is affected. The stress hormone production and degeneration induced is the major cause of the chronic disease problems we face today. The first thing you need to do, even you think you are healthy, is to detoxify your body of these contaminants. None of the vitamins and nutritional supplements will make much difference if you do not get the toxins out first. Nutritional supplementation is secondary to detoxification and the process takes years of commitment.

It is like flying an airplane without the proper credentials, you are bound to crash. So regardless of your disease state, make an appointment with your physician for check up, get healthier and improve your outcome.

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The anti-oxidants that you need to include in your diet



STAR HEALTH DESK

Free radicals are highly reactive chemicals that can damage important part of cells, including deoxyribonucleic acid (DNA). Free radicals are also natural by-products of normal metabolism and an increase number of free radicals in the body are believed to contribute to the ageing process, as well as the development of health problems.

Due to biochemical processes, it is normal for free radicals to be present in the body at all times. A healthy immune system is usually able to minimise their potential damage. However, not all free radicals are potentially dangerous. For example, the immune system creates valuable free radicals to control and destroy viruses and bacteria.

The marauders

One source of free radicals is actually a normal everyday diet. The body, in the process of obtaining nutrients, utilises oxygen and oxygen molecules containing unpaired electrons are released into the body.

The oxygen atom has four pairs of electrons in a stable state. It becomes unstable when it loses an electron. An oxygen atom with seven electrons is referred to as free radicals.

Electrons, being negatively charged, usually occur in pairs, and it is the pairing of the electrons that creates stability. Unpaired electrons facilitate other atoms or molecules to bind with them in a chemical reaction. It is the ease with which they bond to other atoms and molecules that creates the danger. In order to stabilise themselves, free radicals quickly attached themselves to body tissues.

The free radical takes an electron from the membrane of a body tissue and by doing

so, produces yet another free radical, which then is obliged by its charge to seek out another electron in our body. What results is a cascade of oxidations – literary rusting body tissues.

Enter the antioxidant

Antioxidants are molecules that can safely interact with free radicals and terminate the chain reaction before vital molecules are damaged, or seek out and scavenge free radicals.

Some of the best antioxidants can be found in natural brews. Antioxidants can stabilise free radicals without themselves becoming dangerous, and this is surely good news for us all!

A list of some anti-oxidants

Here are a few anti-oxidants that everyone should include in their diet.

- Green tea research has indicated that one of the main anti-oxidants found in green tea has been found to be much more powerful than other known antioxidants.
- Grape seed extract not only scavenges free radicals on its own, but grape seed also donates electrons to vitamin C and E so that the major antioxidants can do their job longer.
- Cereal grass contain antioxidant enzymes that delay the onslaught of cellular deterioration and mutation, and have been used as the treatment for reverse ageing and degenerative diseases.
- Cranberries, the little ruby fruits, also known as lingo berry contain one of the most potent anti-oxidants that tackles over-oxidation and free radical pathology, hence protecting against cancer and other malignant diseases. They also promote wound healing improve blood circulation.

People should come forward to meet the demand of safe blood

DR DIPIKA MOHANTY

A voluntary blood donor organisation can be critical in ensuring that there is sufficient blood supply. The goal of securing a sufficient number of voluntary, non-remunerated blood donors has not yet been achieved in Bangladesh.

Someone who is seriously ill needs blood transfusion. It may be a newborn, a child, an adult involved in road traffic accident, a woman with bleeding during delivery or an elderly person with refractory anaemia. Very often we assume that the transfusion of blood or its components will be available in the hospitals. But we forget that the blood cannot be manufactured by a machine.

There is a dire need of safe blood in the country and it is achievable if we all play our role and all people in good health

decide to join forces with the family of voluntary blood donors. So, there is urgent need for appropriate strategies that will help not only sufficient quantities of blood but safe too.

Safe blood is the blood which does no harm to the person who receives it. Blood can be life saving, but it may cause serious illness or even death to the recipient at the same time if any infection is present in the donor's blood that can be transmitted by blood transfusion. Infections that can be transmitted by blood transfusion include HIV which leads to AIDS, Hepatitis B, Hepatitis C, Syphilis and Malaria. Therefore, to ensure that the blood unit is safe it should be tested for the above mentioned diseases. The key to success is safe blood donor selection who have a healthy life style.

Blood can be donated by

people who are healthy and do not have an infection that can be transmitted through their blood. Healthy adults can give blood regularly. Men can give blood every 3 months and women can give blood every four months.

World blood donor day is June 14th and this is being celebrated every year world wide with the aim of spreading the message that having volunteers who are willing to give blood regularly, for no payment, is the best possible way of ensuring a safe blood supply. The concept behind the day is that it would be developed, year by year to encourage a better understanding of the need for blood.

So, friends let us donate the "gift of life" and do not lag behind other countries.

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FREQUENTLY ASKED QUESTIONS

Knee pain in old age: Causes and remedies

DR MALI

Knee pain in old age is a common problem. A significant numbers of patients attend the out patient clinics in orthopaedic practice. Usually patients complain about pain associated with repeated knee swelling, difficulty in walking, specially stair climbing. Patients are usually advised to take pain killer, physiotherapy, use of stick and change of life style. Some of them get rid of the pain with medication but some do not. They usually consult different doctors with lot of questions in their mind. This write-up may fulfill their questions.

Why knee pain develops at old age?

Knee pain in old age is usually due to age related wear and tear of the knees called osteoarthritis (OA). The covering of the bony ends undergo "wear and tear" causing pain, swelling and difficulty in walking. There may be a genetic cause in some people, which increases their chances of developing osteoarthritis.



What if I have a previous injury to my knee in the past? Will I be at risk for developing OA as well?

Abnormal functions of the knee joints resulting from fractures of the knee, torn cartilages and torn ligaments can lead to degeneration many years after the injury. The mechanical abnormality leads to excessive wear and tear – just like the out of balance tyre that wears out too soon on your car.

How I can understand that I have OA?

If you have knee pain during walking, climbing stairs, standing from squatting or prayer time etc. at the age of 50 onwards means you might have some degree of OA in your knees. The pain may be associated with night cramp and recurrent swelling of the knees. Sometimes, your knee may become bowed or there may be bony outgrowth at the bony ends which can be identified by x-rays. When the condition is long standing it becomes worse and the pain may persist all the time and may even keep you awake at night.

How I can confirm my diagnosis?

The diagnosis of a degenerative knee starts with a complete history and physical examination by a doctor. X-rays will be required to determine the extent of the degenerative processes and may suggest a cause for the degeneration. Other tests

may be required if there is reasons to contributing to the degenerative processes. Blood tests may be required to rule out a systemic arthritis – arthritis that affects the whole body (such as Rheumatoid Arthritis) or infection in the knee.

Is OA related with diet?

There is no proven relation with food habit and development of osteoarthritic knees. But the diet which increases the body weight can indirectly aggravates the condition. Weight control is specially important for people with OA, because being overweight puts extra weight on the arthritic joint and can add extra discomfort.

Is OA occurs male and female equally?

No, women are more prone to develop OA than men. Out of 3 women 2 are affected with OA at the age of 65 and more.

What are the treatment options?

There are following treatment options.
1. Medication and physiotherapy and occasional steroid injection into the knee.

2. Surgery: It is of two types a) Arthroscopic wash out. b) Replacement surgery.

What about steroids into the knee?

Steroid injection into the knee is commonly done in our country. The injection is a combination of local anesthetics as well as steroid. The anesthetic agent is short acting, which offers immediate pain relief but lasts for about 5-6 hours. The steroid helps to contain the inflammation in the knee and this may last for few weeks to months.

I have heard that steroids have serious side effects. Should I get a steroid injection into my knee?

Oral steroids have numerous side effects. All steroidal medications should be prescribed by a doctor especially if taken orally. However, local injections of steroids will act only in the knee and are NOT absorbed by the body. Hence, there will be no systemic side effects.

How many times can I get a steroid injection into my knee?

You can have it 2-3 times a year at the most. However, if there is no effect, it is of no use in repeating the steroid injection into your knee.

Is there any exercise that can help avoid surgery?

Physiotherapy is a very important component of orthopaedics. However, there are no known specific exercises that can prevent surgery or slow down the progression of OA. More importantly, you should stay active and continue walking as much as you can. Once you feel that the pain is getting you down, it is probably the time you should talk to your surgeon about the other alternatives. The use of a walking aid or cane helps to reduce the load on the knee joint and is a good aid from the beginning.

When do I need surgery?

If conservative treatment have not been successful in relieving pain, surgery may be considered. In the more severe cases of OA, where the joint is unstable or progressively deformed, surgical measures may be a better option.

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Early hope seen for green tea in fighting blood cancer

REUTERS HEALTH, New York

Green tea may help treat a form of adulthood leukemia, if the cases of four patients are any indication, according to a new report.

Doctors at the Mayo Clinic in Rochester, Minnesota, found that of four patients who started drinking green tea or taking green tea extracts, three showed clear improvements in their condition in the following months.

The patients all had chronic lymphocytic leukemia, or CLL, a form of leukemia. Like all types of leukemia, CLL is a cancer of the

blood and bone marrow, in which abnormal white blood cells replace healthy blood cells.

Reviewing the records of the patients, the doctors found that three showed signs of a regression in their cancer after they started to drink green tea or take green tea capsules. The fourth had an improvement in her white blood cell count, though her disease remained unchanged by standard criteria.

In one case, the patient had been showing progressive swelling in her lymph nodes - one of the characteristics of CLL - before she starting taking green tea capsules twice

a day. Over the next year, her lymph nodes steadily decreased in size, according to findings published online by the journal Leukemia Research.

Another patient showed an improvement in her white blood cell count after she started drinking eight cups of green tea per day.

These cases alone cannot prove that green tea or its extracts conferred the benefits, Shanfelt told.

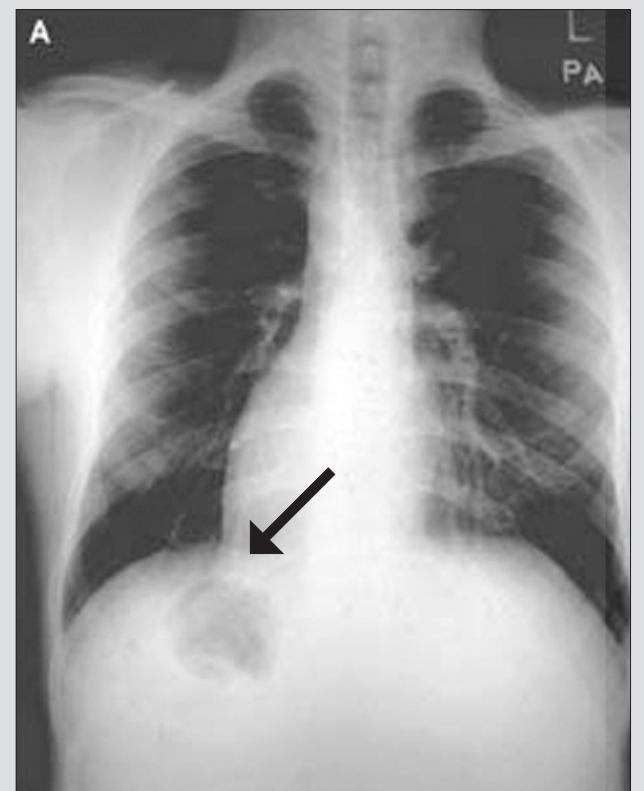
A number of previous studies have suggested that green tea and extracts of the beverage have cancer-fighting abilities, possibly due to the tea's concentration of certain antioxidants - compounds that help ward off cell damage that can lead to cancer, heart disease and other ills.

EGCG is thought to be the most potent of these tea antioxidants. The Mayo study from last year suggested that EGCG might induce leukemia cells to self-destruct by interfering with the communication signals they need to survive. But the exact mechanism by which green tea may fight cancer remains unclear.



Medical Interesting

Heart in the right side



DEXTROCARDIA (HEAR IN RIGHT SIDE): Usually the major portion of human heart lies in their left side. In some rare cases, it may be found in right side. However, it is not unnatural.

On routine physical examination, a 35-year-old healthy gardener was found to have right-sided heart sounds. Radiography of the chest showed the cardiac apex pointing to the right. Both the aortic arch and the stomach bubble were located on the right side as well.

Dextrocardia with situs inversus was diagnosed in this otherwise healthy man.