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Preface

Someone has rightly said: “**Health is Wealth**”
A sound mind in a sound body is greatest blessing of God. Any person who is ill and lying in the bed can evaluate the blessings of Good Health. To avoid illness, doctors, scientist, yogis and dieticians are working tirelessly. They have found and invented certain methods and medicines to prevent diseases. In health edition of the newspapers we find articles written by doctors, dieticians and yogis concerning health so that common man can be benefitted. We, the sewadars of Pingalwara have gathered such articles, got printed and compiled in this book “**Hints for Sound Health.**” These articles are really eye-openers and we can get guidance for nutritional food. Some people believe in supplementing the food with multi-vitamin tablets regularly can be harmful. The study says, “Beta carotene, Vitamin A and Vitamin E given singly or combined with other anti-oxidant supplements significantly increase mortality.

Similarly the people these days are very much conscious about their weight. They are misguided by certain quacks and take harmful pills. An article A to Z weight loss written by dietician Simran Sandhu has guided properly the various methods of weight loss.

I am sure readers will take hints from this book for their sound health and will not be misguided by quacks. This is a humble service performed by the team of sewadars in Pingalwara, because our aim is ‘*Sarbat da Bhala*’ (Welfare of all creatures).

—**Inderjit Kaur**
President

All India Pingalwara Charitable Society (Regd.)
Amritsar.

WELLBEING

Anxious About Your Health?

How does one handle a person who is convinced that he has a life-threatening disease even when doctors assure him that it is not so?

ARUNA CHANDARAJU

In the past three years, Devang Sharma has made 29 hospital visits, changed four specialists and got 40 diagnostic tests done for his septuagenarian father who is convinced he has several serious maladies. Despite assurances to the contrary, Rajeshwari Mohan, 46, dreads she is in the early stages of Alzheimer's Disease, especially when she forgets where she kept the car-keys, when she can't recall a childhood friend's name and whenever she returns—absentmindedly—to complete an already finished task. The palpitations of Sridhar K. 37, have been thrice diagnosed as anxiety attacks, but he is convinced it's heart disease.

All three are suffering from hypochondria—a mental disorder in which there is a belief that real or imagined physical symptoms are signs of serious medical illness despite assurances and other evidence to the contrary.

Dr. C.R. Chandrashekhar, Professor of Psychiatry, NIMHANS, elaborates: “When a person believes for six months or more that he has a disabling disease or life-threatening disorder or is excessively pre-occupied with functioning of one or more organs, he has Hypochondriacally Disorder. However, when similar persistent doubts occur but intensity and duration are not enough to be labelled a disorder, he has hypochondriacally Symptoms. Finally, ‘Transient Hypochondriac Symptoms, are what many of us experience—false alarms or sudden, unfounded fears when we suspect that a bodily sign indicates onset of some disease especially when we have just read about it or someone we know has died of it.’”

Hypochondria has no age or gender bias. Also, symptoms may change and shift. Hypochondriacs brood over their symptoms and ‘disease’ while bathing, driving, eating, travelling, in-between work; worry about its repercussions, gather information from books, magazines and the internet...These ‘big fears about small symptoms’ persist despite negations from doctors and diagnostic tests. Leading often to a pattern where hypochondriacs ‘doctor-shop’ driven by

an agenda: to prove they are “really’ ill.

Risk factors

Risk factors include certain personality types and circumstances, explains Hyderabad-based psychiatrist Dr. Sridhar Reddy, like “anxiety-prone, neurotic or attention-seeking personalities those with poor coping skills or low-confidence. Feeling deeply lonely or neglected could be a cause. Not having enough constructive work is a major factor”.

Another underlying factor, says Kolkata-based psychiatrist Dr. Rajneesh Sengupta, is close and continuous observation of symptoms and progress of disease in a real patient. This might affect one psychologically. Devang’s father grew up in a backward village where he saw many succumb to illness from lack of medical attention. Sridhar’s two relatives died of heart disease. While accompanying these relative to hospital, he would read the charts about heart problems and later hear the doctor talk. These nurtured his anxieties. It could also be a grossly misunderstood problem. In Rajeshwari’s case it was high stress plus excessive multitasking, which was affecting her memory and not Alzheimer’s

Uncertainty breeds anxiety. So, your doctor could be guilty too, reveals Dr. Chandrashekhar. “This is sometimes an iatrogenic or doctor-induced phenomenon. Doctors who are vague in their diagnosis because of carelessness or worse because they failed in diagnosis and also doctors who order repeated tests from a commercial motive fuel the problem.” Also, for some unscrupulous doctors, a hypochondriac, especially a wealthy one, is a comfortably constant source of income, so they play along and nurture patient-anxieties. Ironically, hypochondria can sometimes lead to real sickness if the patient has undergone too many invasive tests.

Treatment

So, what’s the cure? Certainly not dismissing hypochondria as overactive imagination. It can be a debilitating mental disorder. If the physician or family outright challenges/criticizes the hypo- chondriac, or accuses him of malingering or ‘dramatising’, it might cause psychological damage. Psychiatrists point out that the precondition to treating any mental disorder is to accept the person and resolve to minimize his distress.

The standard medical approach is CBT or Cognitive Behaviour Therapy. Dr. Manju Mehta, Professor, Clinical Psychology, AIIMS, explains: “CBT is a multi-pronged intervention. We first counsel family members to not reinforce hypochondrial behaviour. They must ignore it; instead, treat him as a normal person. Second, we train the patient in distraction techniques—instead of focusing on the symptoms, he must do something Constructive (the keyword) that interests him like gardening, music, kitchen–work...We teach positive thinking, since negative thoughts are a major characteristic. Through detailed analysis we identify the problem areas: not having friends, not doing well at work, unable to take criticism and help build confidence and skills in these deficit areas.

Finally, attitude matters. We are human; sometimes our heart skips a beat, the stomach gets upset and we get sores and swellings. Get a test, do what the doctor ordered. But after that, get on with your life.

(The Hindu, 22 March, 2009)

BELLY FAT

Literally Breathtaking

Among other things, belly fat also puts pressure on your lungs, making breathing increasingly difficult.

CARRYING excess weight around the middle can impair lung function, adding to a long list of health problems associated with belly fat, according to a study published in the *American Journal of Respiratory and Critical Care Medicine*.

Abdominal obesity is already linked with diabetes, high blood pressure and heart disease as part of a cluster of health problems known collectively as metabolic syndrome.

Researchers have now shown that a large waist measurement is strongly associated with decreased lung function, regardless of other complicating factors that affect the lungs such as overall obesity and smoking.

The researchers analysed health statistics of 1,20,000 people, assessing demographic background, smoking history, alcohol consumption, as well as lung function with respect to a measure of obesity known as body mass index, waist circumference and other measures of metabolic health.

“We found a positive independent relationship between lung function impairment and metabolic syndrome mainly due to abdominal obesity”, says Dr. Natalie Leone of the French National Institute for Health and Medical Research.

The researchers defined abdominal obesity as having a waist circumference of greater than 35 inches for women and 40 inches for men.

The researchers think belly fat may impair the way the diaphragm and chest function. Fat tissue is also known to increase inflammation in the body, which may be playing a role.

Dr. Paul Enright of the University of Arizona said in a commentary there is now enough evidence to include waist measurements as part of routine assessments of lung function.

“Abdominal obesity could then be highlighted on the printed report so that the physician interpreting the report could take the effect of obesity into account,” Enright wrote.

–Reuters

OTHER EVILS OF A PAUNCH

* EXCESS BELLY fat—lying deeper in your abdomen—is the fat that research shows can raise the risk of heart disease, stroke, breast and colon cancer and dementia.

* BELLY FAT combined with high stress levels may boost the risk of type 2 diabetes, insulin resistance in case of men, low levels of good LDL cholesterol and sleep apnea.

* BELLY FAT may also be linked to an increased risk for migraines, at least till the age of 55. And it is a better indicator in case of women than men. Women with extra belly fat are 30 per cent more likely to experience migraines than women without excess belly fat.

* THE BAD news is that even being normal weight or thin does not ensure that you have no belly fat. And the pinch test—pinching skin from the belly to see if it comes to more than an inch—is not enough to tell if you have belly fat. This fat lies deep, stored around the organs, so even thin people may harbour a considerable amount of belly fat. A study of 800 people by researchers at London’s Imperial College found 45 per cent of thin women and 65 per cent of slim men carried excess visceral fat.

* BELLY FAT may be the result of age, lack of exercise and regular alcohol intake. It may also be genetic. But with regular exercise and moderation of Calorie intake, the problem can be controlled.

The Indian Express, 7 March, 2009

Don't Skip The Pap Test

Dr. Shobha S. Krishnan

Cervical Cancer, the leading cancer among women in India, is actually preventable.

Imagine if I told you that there is a cancer for which we know the cause, have a simple and inexpensive test for early detection and have safe and effective treatments available; yet it is the second leading cancer among women in the world and the leading cancer among women in India. This is the reality of cervical cancer.

Nearly one in four cases of cervical cancer around the globe occurs in India. Even worse, cervical cancer is a disease of the young; it peaks between the ages of 35-50 and not only takes the lives of young women but also devastates their families along the way.

Despite this, there's good news: cervical cancer is preventable. By arming ourselves with the knowledge necessary to take responsibility for our health, we can begin to erase this major chapter in the book of women's health.

Causes

Over 99 per cent of cervical cancers are caused

by The Human Papillomavirus (HPV). There are several types of HPV, but only about 15 cause cancer. HPV causes disease in both men and women, but cervical cancer is the most serious. Genital HPV infections are sexually transmitted and most of them are “silent”, people who carry the virus don't know they have it and transmit it freely to their sexual partners. Nearly 90 per cent of HPV infections resolve spontaneously within 24 months, so HPV rarely causes disease.

In a minority of people, however, the infections persist as a result of a weakened immune system due to factors like stress (and who doesn't have stress!) smoking, poor nutrition, certain medication, having sex at an early age, multiple pregnancies and HIV—all of which can propel HPV infections to cause precancerous and cancerous lesions of the cervix. Additionally, one's sexual history and their partner's also play a role; having multiple sexual partners and/or unprotected sex makes a person more prone to HPV infections. From a medical and wellness standpoint, it's important to realize that sexual experimentation before marriage is becoming more prevalent and even

if our children wait until marriage to have sex, there is no guarantee that they won't be exposed to the virus through a partner who didn't: HPV doesn't necessarily mean promiscuity because you can get the virus from a monogamous relationship!

The most widely used test, the pap test, detects changes in the cells of the cervix caused by HPV. If left untreated, it may progress to cervical cancer. Unfortunately in India, Pap testing is not performed extensively; hence the high numbers of cervical cancer. Moral of the story, get your Pap test today!

Unfortunately, there is no treatment to rid HPV from the body. Only the diseases caused by HPV such as warts, precancerous and cancerous lesions can be treated. Even then, there is no guarantee that the virus has left the body. But the ABCDE's can help keep HPV at bay: Abstinence. Being faithful, Consistent condom use, Delayed sex and Education.

And don't forget, healthy lifestyles such as our home-grown yoga techniques can boost our body's immune system in general and help fight diseases, including those caused by HPV.

Preventive steps

As far as prevention goes, there are now two

new vaccines for cervical cancer. Gardasil and Cervarix. Both are preventive and therefore, recommended for girls 10-12 years old, when antibody titres are high and when children visit their doctor's offices for other booster shots.

You may wonder why one should get the vaccine when there is a Pap test. An ounce of prevention is always better than a pound of cure! The Pap test only detects abnormalities after the virus has infected the cervix, whereas the vaccines prevent it in most cases. However, as the vaccines don't prevent all cervical cancers (they protect against 70-80 per cent). Pap testing is still required to detect the remainder of cervical cancers.

Two issues have plagued parents: will the vaccine promote sexual promiscuity and is it safe? Being a parent myself, I fully understand these concerns; but having researched this subject, I know the top two things that adolescents fear about sex are pregnancy and HIV, both of which are not prevented by the vaccines. Think of it this way: Getting a car with an airbag means the car is safer in the long-run, but it isn't reason to drive recklessly! The bottom line

is, we as parents have one simple desire: to protect our children from as many diseases as possible.

For those parents who are concerned about the “newness” of the vaccine, the latest report from the Centers for Disease Control shows that there are no signs to directly link Gardasil (the only vaccine thus far available in India and the U.S.) to any serious adverse effect to date. The CDC will continue to be vigilant and monitor safety data on an ongoing basis.

No one can deny that vaccines are miracles of modern medicine. But scientific challenges, public acceptability, ethical dilemmas and the injustice of uneven access to the vaccines remain controversial even today. One thing is certain: though the HPV vaccine is one of the most cost-effective ways to prevent cervical cancer, it will not, should not and cannot replace pursuing healthy lifestyles and safer sexual practices.

*The writer is a New York based gynecologist, primary care physician and author of **The HPV Vaccine Controversy: Sex, Cancer, God and politics**. The book is written without the influence of any pharmaceutical companies or special interest groups.*

(The Hindu, March 8, 2009)

Ebola Enigma

Viruses mutate very fast because they multiply very fast. They can be harmless now but can become very harmful in an instant. The scary thing about Ebola Reston, says Maneka Gandhi, is that it is airborne. It just needs one tiny mutation and every other disease will look good.

THE Ebola virus spreads one of the most dangerous diseases in the world and no scientist as yet knows who the hosts are and how it is transmitted to humans. Ebola is the common term for a group of viruses of the family Filoviridae and for the disease that they cause, Ebola haemorrhagic fever. The virus is named after the Ebola River, where the first recognized outbreak of this fever occurred and Ebola virus first came to light in 1976 in outbreaks of the haemorrhagic fever in Zaire and Sudan.

The Zaire epidemic of last year had a fatality rate of 90 per cent, the highest of any pathogenic virus. It is believed to be transmitted to human via contact with an infected animal host. The virus is transmitted to other people that come into contact with the blood and body fluids of the infected person.

Ebola hemorrhagic fever symptoms are fever, vomiting, diarrhoea and generalized pain with internal

and external bleeding. Mortality rates are extremely high, with the human fatality rate ranging from 50-89 per cent.

There is no vaccine or treatment. A typical outbreak spreads through a village or hospital, infects the entire population and then dies out when it runs out of hosts.

Ebola Reston is a variation. It came to the attention of the world when it was found in monkeys imported from the Philippines into the USA in the city of Reston, Virginia in 1989. It kills monkeys but was not known to seriously harm people. So, after the initial scare which inspired Richard Preston to write "The Hot Zone" (which became the movie Outbreak) it has been largely ignored even though it is the only strain known to be airborne.

However, it can be ignored no longer. Ebola Reston has been found in pigs in the Philippines that were bound for export as meat, in two commercial and two backyard free-range farms in three provinces. The Filipino government, in December 2008, asked the UN World Health Organisation and the Food and Agriculture Organization to send scientists to help them discover how pigs contracted Ebola. Planned shipments of 50,000 tonnes of pork to Singapore and other countries have now been suspended after traces

of Ebola Reston virus were found. If the virus had not been caught in America, it would have gone completely undetected in the pigs home country or in any other country that the meat had been exported to.

Unusual deaths in pigs in May 2008 caused the Filipino government to send the pork for testing to the USDA's Foreign Animal Disease Diagnostic Laboratory on Long Island in August. Ebola Reston was identified on 30 October 2008 in the samples and the Philippine department of agriculture was informed. International health officials have expressed concern over the fact that this was not made public until December-end and pork continued to be served across the country. The Filipino government's Davinio Catbagan, director for the Bureau of Animal Industry, cited concern for the pork industry as the reason for the delay! According to people at the Who and the Paris-based World organization for Animal Health, the Philippines authorities decided to go public only after being pressured by those who groups and the Fao.

Dr. Bernard Vallat, director-general of the OIE, said it was "not an easy negotiation" to persuade the Philippines authorities to go public with the news, which they did on 10 December 2008.

Ebola in pigs is a very bad thing. It should scare the hell out of you. Viruses cause diseases like

the common cold, HIV, chicken pox, small pox, etc. Viruses mutate very fast because they multiply very fast. They can be harmless now but be very harmful in an instant. The scary thing about Ebola Reston is that it is airborne. It just needs one tiny mutation and every other disease will look good.

The presence of the Ebola Reston virus in the pigs from the Philippines has rung emergency alarms all over the world. The virus has gone from monkeys to pigs in a very short time. Pigs serve as genetic mixing vessels for viruses that pass from animals to humans. “When a virus jumps species, in this case from monkeys to pigs, we become concerned, as pigs are much closer to humans than monkeys and this is usually the route viruses take to ‘jump’ to humans,” “says Peter Cordingley, a Who spokesman.

More than 60 per cent of the estimated 1,415 infectious diseases known to us are capable of infecting both animals and humans. Diseases such as anthrax. Rift Valley fever and monkey pox are zoonotic—meaning these originated in animals but have crossed the species barrier to infect people. New virulent zoonotic diseases have originated, such as West Nile Fever, Marburg, Ebola Haemorrhagic Fever and Avian Influenza.

It is estimated that about 75 per cent of the

new diseases that have affected humans over the past 20 years have been caused by pathogens originating from animals or animal products. This was the case of HIV—the virus that causes Aids, which experts believe jumped the species divide from apes to humans and has killed over 100 million people so far.

Livestock agriculture is the most important industry of many countries. Factory farming, careless imports and export, a rise in meat-eating, which has led to farms overcrowding their livestock and feeding them bad food, hormones and antibiotics, has led to many more viral mutations that are zoonotic.

Who knows which pig farms sold pork from Ebola victims or exported the meat to countries like India that have no safeguards on checking meat? Who knows how many live pigs have been brought in by breeders. This could be the lethal bomb that could kill us all—starting with those people who eat the meat. All across India, pigs are reared for meat in all the slum colonies in the filthiest conditions. Who knows where they will take this disease and who knows which other animals bred for meat could be carrying it? After all, bird flu also started as a common flu for chickens only.

(The Statesman, February 8, 2009)

Slim Chance Of An Attack? Wrong!

The lean and slim also need to eat healthy food and exercise to lower their risk of heart disease.

Sanchita Sharma
New Delhi

NATURALLY-THIN people who don't have to watch what they eat or exercise to stay in shape are putting their health to risk. Cardiologists say thinness is not always an indication of good health because levels of artery-clogging 'bad' cholesterol—or low density lipoprotein (LDL)—in the blood are higher in thin inactive people than in overweight people who exercise.

“Most thin people think they don't need to exercise because they don't have to watch their weight. They need as much exercise to stay healthy because exercise pushes down LDL cholesterol, increases heart-protecting good cholesterol (high density lipoprotein or HDL) and keeps blood pressure in check,” says Dr. Ashok Seth, chairman and chief cardiologist, Max Heart and vascular institute.

When too much LDL cholesterol circulates in

the blood, it slowly deposits on the inside walls of the arteries as a thick, hard deposit called plaque. If the block is big enough to stop blood flow, it can cause a heart attack or stroke. LDL cholesterol of less than 2.59 mmol/l is the optimal level and more than 4.14 mmol/l shows heightened risk of heart disease.

“Naturally thin people do not enjoy protection from heart disease as people with any type of body shape can have cholesterol, Overweight people are more likely to have high cholesterol, but thin people should also get their cholesterol checked regularly”, says Dr. K.K. Agarwal, chief cardiologist, Moolchand Medcity. A study published in *International Journal of Obesity* in 2007 reported that lean people who exercise have near-optimal levels of LDL cholesterol, while lean non-exercisers had high levels of bad cholesterol.

“The term for people with normal weight with high levels of body fat and cholesterol is normal weight obesity. Most of my thin patients are stunned when they are diagnosed with heart disease because they think it is a disease that afflicts only the overweight and obese,” he explains.

Often, people who don't gain weight easily tend to eat more fatty food laden with heart-damaging

saturated and transfat. “More than your weight, it’s your lifestyle that defines your heart risk. Naturally thin people do not enjoy protection from heart disease so nobody can say they can eat anything they want without worrying about heart disease,” says Dr. Seth.

Exercise alone lowers risk of heart disease by 20 per cent. “We have found that thin people who are hypertensive have worse coronary artery disease and more complications associated with peripheral vascular disease because their artery walls are thinner and more prone to damage”, says Dr. Seth.

This, of course, does not mean you can put on as much weight as you like. “A retrospective survey of 90 people at Moolchand showed most of them gained about 10 kg in 10 years after the age of 18 years. The normal weight gain after adolescence should not exceed 5 kg. People who gain 10 kg. More are at risk of diabetes and if he weight gain is over 30 kg. they have probably developed heart disease and diabetes,” says Dr. Agarwal. The study included people from all cross-sections—30 resident doctors, 30 nurses and 30 patients—95 per cent of who had gained weight.

“The bottom line is that everyone needs to eat healthy and get physically active regardless of their

weight.” Says Dr. Agarwal.

HEART DISEASE IN INDIA

3 million People die of cardiovascular disease (CVD) such as heart disease and stroke.

30 per cent of all deaths are caused by CVD

5 million will die of CVD by 2020

50 per cent of these deaths are under 70 years.

10 per cent people aged 20 in urban India have CVD

India lost USD **9.2 million** potentially productive years of life lost to CVD in 2000

India will lose USD **18 million** potentially productive years of life to CVD by 2030

32 million people have diabetes

70 million will have diabetes by 2025

118 million have hypertension (high blood pressure)

213 million people will high blood pressure by 2025

DIET TONIC

Some foods, say experts, can bring huge health benefits if they are made a part of the daily diet and taken in the prescribed amount. One heaped teaspoon is roughly 5 gram.

Bengal gram (50gm/day)

Decrease bad cholesterol and triglycerides, no significant change in good cholesterol . Lowers heart

attack risk by 24 per cent.

Soya (50gm/day)

Lowers bad cholesterol. Cuts heart attack and stroke risk by 45 per cent.

Psyllium husk (Isabgol) (15gm/day)

Lowers cholesterol, triglycerides and blood sugar level. Cuts heart risk down by 30 per cent, blood sugar levels go down in type II diabetes.

Garlic (3-4 cloves)

Reduce plaque formation in the arteries and lower heat-threatening homocysteine levels in the blood. Reduces heart risk by 30 per cent.

Fenugreek (25gm/day)

Anti-inflammatory action prevents narrowing of arteries, lowers cholesterol, blood pressure and blood sugar levels. Cuts back heart stroke risk by 45 per cent, also lowers blood sugar in type-11 diabetes.

Amla (two a day)

Rich in vitamin C, a powerful antioxidant that boosts immunity. Lowers heart and stroke risk by 24 per cent.

Risk Checklist

Physical factors

Go to a doctor if you have one or more of the

following risk factors.

Smoking. Smoking decreases the age of heart attack by nearly a decade in all risk factor combinations.

High blood pressure You have high blood pressure (hypertension) if you a systolic blood pressure of at least 140 or a diastolic pressure of at least 90 or if you take medicine to lower your blood pressure.

Low HDL (“good”) cholesterol. An HDL under 40 is too low. However, if your HDL is at least 60, it cancels out one of their risk factors.

A family history of premature heart disease. If your father or brother had heart disease before age 55 or your mother or sister had it before age 65, you have this risk factor.

Diabetes People with diabetes are as likely to have a heart attack as people who have already had one. Diabetics also need aggressive treatment because they are more likely to die during or soon after a heart attack than non-diabetics.

Abdominal obesity A waist size larger than 38 for men and 35 for women may be a sign of the metabolic syndrome, which is characterized by a group of risk factors such as diabetes, high blood pressure, elevated triglycerides, low good cholesterol (HDL) and high

bad cholesterol (LDL) and a pro-inflammatory state (elevated levels of C-reactive protein in the blood).

Age. Men aged 45 or older and women aged 55 or older have this risk factor.

Psychosocial factors

According to *The Lancet*, psychosocial pose heart attack risk as much as smoking, high blood pressure and obesity.

Anger/hostility: Atherosclerosis (build up of fatty deposits in the arteries) advances faster in people who are hostile and aggressive. Anger can also trigger heart attacks.

Anxiety: Intense anxiety, the kind associated with fear of enclosed places, heights, crowds and the like, can sometimes set off a sudden cardiac arrest.

Social support: Among heart attack survivors, social isolation is almost as important as high cholesterol, high blood pressure, and smoking at predicting long-term survival.

Chronic stress: Constant stress from work, financial problems, a troubled marriage, taking care of a parent or partner has been linked with the development of heart disease.

(The Hindustan Times, 13 January, 2008)

Stress Aggravates Neck Pain

Dr. Ravinder Chadha

The causes for chronic neck pain are varied such as bad posture, sitting in front of the computer for prolonged periods reading incessantly without a break. Stress, sensitive nature, insomnia (lack of sleep), etc. aggravate chronic neck pain. Such patients apart from suffering from neck pain also complain of headache. Dizziness, etc. long supple necks are more vulnerable to pain as these require strong muscles to support them.

Symptoms

Pain at the back of the head and neck.

Pain and restricted movements of the neck in one or more directions.

Individuals suffering from anxiety and certain psychological disorder are candidates for experiencing pain or slight provocation vis-à-vis the feeling of excessive pressure of weight of the pillow which often becomes intolerable.

Complaints like numbness, tingling and burning felt in the scalp region.

In certain cases, a buffalo hump may develop at the lower part of the neck.

Physical examination reveals various trigger points around the neck which are tender.

Treatment

The primary aim of treatment is alleviation of pain and stress.

Individuals afflicted with pain avoid exercises in order to prevent pain which in turn weakens the neck muscles. In such cases, there is loss of the natural healthy curve and such curve restoration cures chronic pain. Exercises facilitate curve restoration.

Manipulation and mobilization of the spine done correctly by qualified individuals bring immediate relief in most cases of neck pain.

Massage combined with electro-therapies like ultra-sound is greatly helpful.

Trigger points: certain trigger points (tender spots) around the neck are associated with referred pain as the original pain spot is located at some distance. Ideally, the cause of pain in the neck is treated and trigger points are dissolved via a local injection, Vapo-coolant spray and massage or stretching of the concerned muscle.

In acute cases, short-term immobilization with cervical collar provides relief. However, cervical collar usage for prolonged periods is not advocated as it could weaken neck muscles. The collar should be removed for an hour once every three hours.

Pranayama and meditation go a long way in relieving neck pain due to anxiety, stress and psychological causes.

Exercises

Exercises should be done correctly to relieve pain as wrong exercises may aggravate pain. Head-rolling exercises, holding the neck in an extra position, should be avoided.

In the first week, initiate stretching exercises for relaxation. This is followed by strengthening exercises with stretch bands for upper neck muscles.

Shoulder shrugs: Standing erect, place your hands on the shoulder of each side. Rotate the shoulder in the forward direction 10 times followed by backward rotation. Repeat it three times every day.

Strengthening exercises

- * Place the palm of the hand on the forehead. Try touching the chin to the chest against the resistance of the hand for a count of 10.
- * Place both hands behind the back of the head; tilt the head backward against the resistance of the hands.
- * Place one hand behind the ear, resisting the motion of bringing the ear to the shoulder on the same side.

Ordinarily neck pain responds to conservative treatment in a short span. If neck pain persists for a long time the associated causes like stress and anxiety should be diagnosed and treated.

The writer runs a pain management clinic in Chandigarh. Email : chadha-r 2003@yahoo.co.in

(The Tribune, 18 March, 2009)

Drugs Beyond Means

GEARING UP FOR THE NEW PATENTS REGIME

Bharat Dogra

There can be no greater injustice than the denial of medicine to a dying child just because to earn super profits the medicine is sold at a price which is several times more than the fair price.

A World Health Organization Survey, reported in the online edition of *The Lancet*, has noted an alarming lack of availability of essential medicines in the public sector. This compels patients to pay higher prices in the private sector or go without medicines.

The study, based on availability in 36 countries, revealed that “cuts” demanded by wholesalers, distributors and retailers plus government taxes and duties have increased prices beyond the means of most. In some countries, add-on costs can double the public sector price of medicines. In the private sector, wholesale mark-ups ranged from 2 per cent to 380 per cent and retail marks-ups ranged from 10 per cent to 552 per cent.

India had been able to provide several essential medicines at a reasonable price thanks to the Indian

Patents Act 1970. This law provided enough scope for our scientists to use new processes to produce low cost drugs. However, the country has now been pushed towards the new WTO-regulated TRIPS regime of patents. This will increase the price of new drugs, no matter how essential they may be.

Price control

Instead of preparing for such difficult times by adopting broad-based steps (including the stepping up and improvement of publicly funded research), the government has been moving in the opposite direction of abandoning the balancing role it had played earlier in protecting the interests of public health vis-a-vis protecting the interests of drug manufacturers. Price control orders have increasingly left out medicines of critical importance to public health. The pharmaceutical policy announced by the government in 2002 has come under considerable criticism for almost abandoning public health concerns and a single-minded pursuit of the industry’s needs. While the legitimate interests of the industry should certainly be protected, the life-saving role of essential medicines must get the highest priority.

The national list of essential medicines mentions the medicines whose prices have to be regulated in order to protect public health. It devolves on the government to ensure the adequate availability and proper quality of these essential drugs at a reasonable price.

The Parliamentary Standing Committee of the 14th Lok Sabha for the ministry of chemicals and fertilizers prepared a report on “Availability and Price Management of Drugs and Pharmaceuticals”.

The report said, “Even though the Hathi Committee Report recommended preparation of a List of Essential Drugs as far back as 1975, it was only in July 2003 and that too on the directive of the Supreme Court that the Government prepared a ‘National List of Essential Medicines’ (NLEM) consisting of 354 drugs. Intriguingly, out of this NLEM, only 50 drugs are under price control.”

The committee, therefore, strongly recommended that the “the government should consider bringing more NLEM drugs under price control for the benefit of the poor sections of the society, particularly when several advanced countries like Canada, Japan, UK,

etc. are stated to be having some system of price control over essential and life-saving drugs. Needless to emphasize, the government should take due note of essential drugs meant for cancer, TB, HIV/AIDS and a new set of diseases like encephalitis and leptospirosis which are increasingly affecting the urban and rural poor masses.”

The report also noted that at present, there are no provisions of fine or penalties for the violation of the Drug Price Control Order (DPCO) 1995 for non-submission of requisite data, price list and for not allowing officers of NPPA to visit and inspect manufacturing premises. The committee, therefore, recommended that DPCO 1995 should be amended suitably to incorporate provisions for compounding offences by stringent fines or penalties therein.

This report was concerned over the fact that the new patents regime can worsen the existing situation. “The committee notes that presently not all patented drugs are under price control in the country. They feel that after the amendments in the Patent Act and the coming of the product patent era, the availability and prices of drugs might be affected. Apprehensions have

been expressed about its possible impact on prices, in particular.”

There can be no greater injustice than the denial of medicine to a dying child just because to earn super profits the medicine is sold at a price which is several times more than the fair price (which includes a reasonable profit margin). Yet this is precisely what is happening in many parts of the world and may happen on a much larger scale in many other countries, including India, as strong patent laws are applied and governments abandon their responsibility to regulate essential drug prices.

Recently, leukaemia patients in South Korea helped to speed up the development of a new drug to treat this disease by offering to take part in trials. But when the drug manufactured by a leading multinational company reached the Korean market they felt cheated as this had been priced prohibitively at dollar 19 a tablet, making it inaccessible for most patients who needed a dose of eight tablets a day. As relatives of dying patients searched frantically for alternatives, they located an Indian manufacturer who could produce the drug for less than a dollar a tablet (about 20 times cheaper than the MNC’s patented drug). But to be able

to support this cheaper medicine they had to get over the new WTO-regulated patents regime by invoking the clause of extreme urgency.

US-Based MNC

The Korean health minister was considering this proposal sympathetically, but faced threats from senior commerce officials in the USA. When the minister persisted in his efforts to help leukaemia patients, he was dismissed. Angry patients and family members marched to the MNC’s local office, only to face injuries at the hands of the police which chased them away.

Earlier, US-based multinationals had quoted a price of dollar 10,000 per patient per year for a combination of three drugs meant for treating HIV/AIDS in African countries. A leading Indian company, Cipla, which had learnt to make these drugs by a different process, made an amazing offer of providing the same combination at less than dollar 500 per patient per year, an astounding 95 per cent reduction in costs.

These examples reveal the extent to which the situation can worsen unless we prepare well in advance for the new patents regime.

(The Statesman, March 20, 2009)

Diagnostic Challenge

When tuberculosis occurs during pregnancy, it can endanger the lives of both the mother and the baby.

Dr. R. Narasimhan

Tuberculosis and pregnancy are two different kinds of stresses that women experience. Their simultaneous occurrence would result in so much strain that it tends to impact the growing foetus as well. TB can affect organs and TB of certain organs poses a diagnostic challenge. India accounts for 30 per cent of all cases of TB in the world. The disease kills many women in the reproductive age and statistics show that if one takes combined mortality rate during pregnancy TB would rank first.

Can TB occur during pregnancy?

TB can occur in pregnancy, as it is an infectious disease caused by *Mycobacterium tuberculosis*.

What are the difficulties in diagnosing TB during pregnancy?

TB is mainly diagnosed by bacteriology and x-rays. During pregnancy, x-rays have to be taken carefully as they are harmful to the foetus. If the x-ray is essential, the abdomen should be covered with a metal shield. It is a precaution all women should observe when asked to take X-rays during pregnancy. Getting

a bacteriological diagnosis is still more difficult, as they cannot cough to bring out sputum. Even in those who give sputum the chances of picking up bacilli is only 30 per cent.

How does TB affect pregnancy?

Since it is an infectious disease, late diagnosis and non-diagnosis can affect both the baby and the mother. In the mother, the disease can become extensive and spread to the baby resulting in a condition called congenital TB.

Is there any difference in the treatment regimen?

No, there is no difference between the two groups.

Can all drugs be given safely during pregnancy?

It depends on the stage at which the diagnosis is made. For example, if the diagnosis is made in the first two months, the priority will be to treat TB rather than maintaining pregnancy. At this point, when organogenesis occurs, the effect of drugs on the foetus is debatable. On the contrary when diagnosis is made in the second or third trimester all the drugs can be given safely as none of the drugs cross the placenta. This will prevent extension of the disease in the mother and also the spread to the baby

The Hindu, March 22, 2009

Inactivity Can Lead to Quick Muscle Loss

The Statesman, March 5, 2009

TORONTO, March 4: Lack of use of muscles leads to their quick loss, says new Canadian research.

Researchers at Toronto's York University say muscles shrink quickly when they are not used. According to Michael O'Leary, a doctoral student in York's School of Kinesiology and Health Science, a week of total muscular inactivity can cause 24 per cent muscle loss.

"It really is a case of 'use it or lose it', he said in a university statement here.

We are seeing more and more evidence of how easy it is to lose muscle, compared to how difficult it is to regain it," said O'Leary.

During chronic muscle inactivity, he said, a process called autophagy—or type 2 cell death—joins with apoptosis—or type 1 cell death—in attacking cells and causing muscles to shrink. Muscles inactivity leads to big increases in the protein I.C3 and Beclin 1 in the body. O'Leary said.

He said these proteins are activated by a decrease in oxygen consumption (by the mitochondria, which supply power to our cells) during muscle inactivity.

This leads to an increase in tiny molecules called reactive muscle oxygen species which are blamed for causing conditions ranging from cancer to wrinkles. In high doses, these molecules wreak havoc on body cells by activating the production of these proteins, O'Leary said.

—IANS

Take Care Of Spaces Between Teeth

Dr. H.S. Chawla

Nature has built your teeth with curved surfaces. Where one side of a tooth meets the convex side of the adjacent tooth, a contact point forms. As one moves from the contact point towards the gums, the sides of the teeth taper, thereby creating a gap between the adjacent teeth.

These gaps between the adjacent teeth are called inter-proximal spaces. When you are young, this space is filled up tightly with gum tissue and you are not aware of a gap. Because you are not aware, the sides of the teeth on either side of the gap are naturally never cleaned.

As the sides of the teeth are not cleaned, the plaque which gathers there remains undisturbed for an extended period of time. This plaque causes the gums to inflame. Dental plaque is a collection of bacteria. The older the dental plaque, the greater is the number of bacteria that can survive without oxygen (anaerobic bacteria). These are detrimental to the health of the teeth and gums.

The bacteria present on the sides of teeth affect the gaps (inter-proximal spaces) and makes them wider.

How dental plaque widens the gaps between the teeth?

It happens in many ways. Firstly, the interaction of bacteria on food produces acid which dissolves enamel in the same manner as acid eats away marble. Over a period of time, gradual dissipation of enamel produces a concavity in the enamel on the sides of the teeth. The larger that the number of bacteria, the more acid they produce.

Secondly, as a reaction to the bacteria on the sides of teeth, the gums inflame and there is hypertrophy—a state of disease. This leads to increase in the size of the gums, thus artificially filling the gaps between two teeth, while the disease progresses unchecked underneath. Enzymes are produced which destroy the fibres that bind the teeth to the bone (alveolar bone). The alveolar bone resorbs and descends; the gum, covering the bone, consequently also moves along with it towards the necks of the teeth. Since the teeth near the gums are narrower than the coronal portion,

this leads to an increase in the width of the spaces between the teeth.

Thirdly, as one goes older, the bone that surrounds the root of the teeth (alveolar bone) also decreases in height. This is an aging process, here the normal decline is slow.

If along with the normal recession of bone, the sides of the teeth are not taken care of and regularly cleaned, the spaces between the teeth widen markedly to annoying levels.

Signs and symptoms of increase of spaces between teeth.

Food gets stuck between the teeth and does not dislodge on its own: a toothbrush is required. The result is that you avoid eating certain food items like “saunf” (aniseeds) cardamom, etc. Regular flossing prevents gaps from increasing.

You can check the abnormal widening of spaces between the teeth by using dental floss right from an early age. Clean the sides of the teeth as thoroughly as you clean the facial/outer surfaces of your teeth. If the spaces between the teeth are wide by now, apart from using floss, use an inter-dental brush as well. This will

prevent these spaces from widening.

Please bear in mind that it is not the use of the dental floss or the inter-dental brush that widens these spaces but on the contrary, their non-use.

Treatment

If the spaces have widened markedly and the sides of the teeth have lost their curvature and there are clear concavities, you need to visit your dentist for restoring these to normal curvature. The spaces between the teeth will decrease by filling these concavities with composite filling material.

The writer, Head of the Dental Department, The Apollo Clinic, Chandigarh, is a former Head, Oral Health Sciences Centre, PGI, Chandigarh.

Watch Your Upper Back

Dr. Ravinder Chadha

Upper back posture (if correct) goes a long way in preventing pain, discomfort and permanent deformity. Children suffer from forward chin neck posture when they sit for long periods in the school. This difficult position is aggravated further due to a low table (forcing them to bend forwards while studying).

Generally, parents/teachers overlook such flaws, thinking that it will be rectified as the children grow older. Parents should be cautious when they watch their child sit/walk with the upper back bending forward or a hump or contour is noticed at the upper back.

The thoracic spine starts just below the neck to midway down the back. This comprises 12 thoracic vertebrae that are separated by discs and attached to each other by ligaments. The normal curvature of the thoracic spine is between 20 and 50 degrees.

Causes of upper back pain

- * Postural round back is very common in adolescents due to an incorrect posture during sitting for a long period in front of the computer.

- * The computer screen is 5 to 20 degrees below

the level of the eyes which exerts excessive stress on the upper back.

- * Sitting for hours in an uncomfortable car/train/airplane seat.

- * Sleeping on an uncomfortable mattress.

- * Individuals spending long hours in the car or at the office table.

- * In the middle age/old individuals suffering from osteoporosis and degenerative disc disease, an upper back hump develops when the bones of the upper spine become thin and collapse on each other due to osteoporosis. This also results in the loss of height.

Mechanical backache occurs due to the following.

- * Sprained or torn ligament/muscle.

- * Injury of the facet joints which hold the backbone together.

- * Spinal nerve root impingement due to a slipped disc causing referral pain to the chest and abdomen associated with numbness/tingling. Investigation like X-rays and MRI often show age-related changes and spinal nerve roots being irritated, pinched or trapped.

Other causes

- * Rheumatoid arthritis, ankylosis, spondylitis, etc.

* Afflictions of stomach liver, gall bladder and pancreas refer pain to the interscapular area. This is due to a shared sympathetic nerve supply between the spinal structures and the concerned viscera.

Treatment

Thoracic pain usually gets better within two weeks with conservative management.

Keeping active is the most important aspect of treatment. Spine is designed for movement and resting for more than a couple of days could cause muscle weakness/stiffness.

Manipulation and mobilization of spine brings immediate relief by resetting the dysfunctional ease of the spine.

The long-term benefit can be achieved by maintaining a good posture while sitting, walking, etc.

Exercises regime when followed religiously to improve flexibility and strength of the upper back:

Posture

Good posture is the mainstay of treatment as it avoids sustained shortening of muscles.

While sitting on a chair hips should touch the back of chair.

The keyboard should be close to the body with elbows bending at 90 degrees at the side of the body.

The screen of reading/writing material should not be below 10 to 15 degrees from the eye level.

Exercises

Scapular squeezing: While sitting or standing expand the chest by approximating the scapula towards each other. Do it 10 times.

Rowing exercise: Hold the theraband in both hands with bend elbows; pull it backward above the shoulders.

Thoracic rotation: Sit on a chair and cross the arms across the chest. Slowly turn the trunk to the right 10 times and then repeat to the left.

Upper body raise: While laying the face downward, raise both arms towards the ceiling. Repeat it 10 times.

In order to prevent upper back pain, always maintain a good posture and regularly perform stretching and strengthening exercises of the upper back.

(The Tribune, 16 September, 2009)

Danger of Weight Loss Pills

WEIGHT & WATCH

NEELANJANA SINGH

Senior Nutrition Consultant PSRI, New Delhi

IT IS a natural and common human trait to seek instant relief for any affliction and ailment. The realm of weight management is no exception. And it is common for pharmaceutical companies to play upon this human weakness.

The history of trends in weight control is replete with instances of magic bullet offerings in the form of weight reducing pills.

Alas! As I have said so often, nothing comes without a price. In our craze for ridding ourselves of unwanted fat, we ignore the very real and often potent dangers of the side effects of these pills.

The most recent instance of this is related to the drug rimonabant, which had to be pulled out of India—and other countries—because it induces suicidal tendencies in its users.

The drug was developed on basis of the fact that bio-active substances from cannabis (cannabinoids) stimulate appetite and therefore if the cannabinoid

receptors are blocked off, a reduction of appetite will occur. It did work as expected, but as a trade off, left the users feeling low and depressed.

What is the current situation vis-à-vis pills?

As of now, there are only two drugs approved by the FDA in the US for long-term use—which means not over two years. The safety and effectiveness of these beyond the two year period has not yet been established. I would like to advise those contemplating the use of these drugs to do so only if their BMI exceeds 30. Potential users who need to reduce weight for medical conditions like altered lipids, hypertension and diabetes may do so if their BMI exceeds 27.

Last week I had discussed the Lipase inhibitor drug or the fat squiring drug—Orlistat. This drug is considered safe and effective because the longest study ever—of four years—on weight loss medications has been conducted on Orlistat.

As mentioned last week, it will soon be launched as a non-prescription or OTC (over the counter) drug. There is second category of obesity controlling medication that acts differently from drugs like Orlistat. Instead of acting on the gut, like

Orlistat, these drugs act on the central nervous system to suppress appetite (quite similar to Rimonabant).

The most prescribed and popular among this class of approved drugs is Sibutramine which was originally used to treat depression. Of course it has its share of side effects! These include symptoms such as dryness of the mouth, constipation and insomnia.

Almost 30 per cent of users have experienced these side effects. A rise in blood pressure or palpitations could also be experienced. Literally this pill is therefore not meant for the faint hearted!

Unfortunately, in my not inconsiderable experience, I have more often than not been besieged by patients seeking instant and effortless means of reducing body weight. The prime cause for weight gain is this extreme reluctance in humans to make lifestyle changes related to eating and physical activity. I would urge all readers who do try weight loss pills for whatsoever reasons to be aware that generally maximum weight loss occurs within six months of starting such drug therapy.

There after the weight tends to level off or even increase.

Of course, very often, there are compelling medical reasons to lose weight quickly and in such instances it may be worth using pills, but this must happen only under strict supervision and monitoring.

For all other members of this growing army of overweight humans seeking remedies caused by their gastronomic indulgences and physical lethargies, I would urge them to alter their lifestyles. Permanent benefits of weight management occur through behavioural changes.

More recently, a lot of Ayurvedic remedies have gained significant popularity.

Ayurveda does have a store of foods and herbs that are known to induce anti-obesity action. The lemon-honey-lukewarm water combo is one of the most touted of folk remedies. But as the effervescent Shammi Kapoor was fond of saying in the film *Manoranjan* “*woh kissa agli baar*”.

The Indian Express, 28 March, 2009

To Prevent Risk Of Heart Disease, Walk Faster

DAVID FREEMAN

SLOW walking may not only mean getting to your destination later, according to a new study by French scientists: Older people who walk slowly are almost three times more likely to die of heart disease and related causes than older people who walk faster.

“The main message for the general population is that maintaining fitness at older age may have important consequences and help preserve life and (muscle) function”, one of the study’s authors, Dr. Alexis Elbaz, director of research at the Paris-based medical research institute Inserm.

He said the study, which appeared in the Journal BMJ, also suggests that a test of walking speed might be used to test the health of elderly patients.

The five-year study, part of Inserm’s ongoing Three City Study, involved more than 3,200 relatively fit men and women, 65 to 85 years of age, living in three French cities. At the start of the study in 1999, the scientists used questionnaires and face to face interviews to assess the health of each participant. They

then clocked the participants’ speeds as they walked down a corridor as fast as possible without running.

Over the next five years, 209 of the participants died—99 from cancer, 59 from heart disease, and 53 from infectious diseases and other causes—for an overall death rate of almost 7 per cent. The death rate among the slowest-walking one-third of participants—those men who walked at the equivalent of about 3.4 miles per hour or slower and women who walked about 3 miles per hour or slower—was 44 per cent higher than that among the two-thirds of participants who had walked faster.

OLDER PEOPLE

Who walk slowly are almost three times more likely to die of heart disease and related causes than older people who walk faster.

Death from heart attack, stroke and related causes was 2.9 times more common among the slowest one-third of participants than among the participants who had walked faster.

The increase in death from heart disease was

seen in both men and women and was unrelated to the ages of participants or how physically active they were.

The researchers found no connection between walking speed and other causes of death, including cancer.

What explains the link between slow walking speed and death from heart disease? One possibility, Elbaz said is that the same risk factors that raise heart disease risk—high blood pressure and diabetes, in particular—also cause—“silent strokes” that make it hard to walk fast.

In an accompanying editorial, Dr. Rowan H. Harwood of Queen’s Medical Center in Nottingham, England and Dr. Simon P Conroy of the University of Leicester said slow walking can be caused by problems in a number of body systems, from bones to muscles to lung and the brain. Some of those are linked by blood vessel problems and by smoking.

The Indian Express, 21 November, 2009

Ban Stapling Food Packets

PUSHPA GIRIMAJI

IMAGINE finding a sharp metallic staple in a piece of *gulab jamun* or *kaju burfi*. One certainly shudders to think of such a possibility, but it has happened and will continue to happen if we do not stop using staples indiscriminately, particularly for sealing food packets. Some years ago, a friend had recounted a horrifying incident about a staple in a piece of *badam burfi* that her four-year-old son was about to eat. Since it was a fairly large piece, she had decided to give her son only half of it. She cut it and outcome the metallic pin.

She was aghast at the thought of what could have happened to her child if he had eaten the burfi along with the staple. It could well have caused serious injuries and this very thought had prompted me to write on the issue. I now come back to the subject because recently, I came across two more cases of staple-in-food. While in one case, the metallic fastener was found in a packet of tea, in another, it was in the wheat flour and caused bleeding injuries to the person who was kneading the flour to make *rotis*.

In fact, several years ago, a consumer activist from Chennai had reported the case of a man who bought *pakor*is and ate, by accident, along with the

food, the staples used to package it, resulting in his suffering bleeding internal injuries. Given the way staplers are used in the country, I am sure there would be many more such cases that would have gone unreported, (Indian Airlines vs SN Sinha, first appeal No. 56 and 71 of 1990, decided on 9-11-1990) A stapler is a mechanic device meant basically to put together sheets of paper.

A stapler is a device meant to put together sheets of paper; We use it as a closure for any packet, including food packets. There is always the risk of the pin falling into the food. The Ministry of Health should ban the use of staples in food packages under the prevention of Food Adulteration Act.

However, we in India seem to use it as a closure or a sealer for any packet, including food packets. And its use is as ubiquitous as plastic. From food grains to processed foods, packages are closed with a series of staples. There is always the risk of the pin not only falling into the food, but also of its causing hurt to those who try to open the packet by removing the pins.

So whenever you find shopkeepers (this applies to restaurants, too) using staples to seal food packets, tell them about the possible danger and stop them from using staples. In fact the Union Ministry of Health should ban the use of staples in food packets

under the Prevention of Food Adulteration Act, just as it has prohibited the use of non-food grade plastic for storing and packing food.

You may remember that some years ago, currency notes used to be always stapled together. Fortunately, the Reserve Bank of India banned the use of staples on the ground that it resulted in the mutilation of the notes. But from the consumers' point of view, it also helped prevent injury to the fingers when one tried to open the bundle of notes stapled at many places.

I find gross overuse of staples by courier companies too. In fact they go to extraordinary lengths to prevent the recipients of the mail from accessing it. The envelope of the packet is stapled at so many places that it takes quite some time and effort to remove the staples and in the process, there is every possibility of important letters, cheques and even greetings cards getting torn or damaged.

The fingers of those trying to open the mail also get injured.

It is time the Union Health Ministry takes note of the seriousness of the issue, prohibits, stapling of food packets and enforces, the order stringently. There are many ways in which food packets can be sealed safely. Stapling is certainly not one of them and it should be stopped.

The Tribune, 1 November, 2009

To Lower Breast Cancer Risk, The Foods To Avoid

Neelanjana Singh

Senior Nutrition Consultant PSRI, New Delhi.

As a nutritionist, I have come across various patients who merrily consume various harmful foods while being under the impression that since their diet included some healthy food they were at the liberty to eat almost anything they want.

In this backdrop, let us take a look at the foods that can help reduce the risks of breast Cancer.

GREAT WHITE HAZARDS

The refined high glycemic index carbohydrates are definitely harmful. Such foods, as opposed to other kinds of carbohydrates, cause sugar levels in the blood to shoot up rapidly after consumption. This includes white sugar, white (polished) rice and white flour (Maida). Such carbohydrates have the ability to trigger hormonal changes, which in turn often promotes cellular growth in the breast tissue leading to cancer.

AVOID EXCESS FAT INTAKE

The connection between fat intake and breast cancer is also noteworthy. Although fats are essential

components in diet, the quality and amount of the intake is crucial.

It has been theorized that high fat diets have a detrimental effect in many ways—one being the ability to depress immunity. Many studies have indicated that high fat diets increase the virulence and spread of cancers. Saturated fatty acids are particularly harmful. The saturated fatty acids in meats promote high levels of hormone estradiol, considered a marker for high susceptibility to breast cancer. Excess intake of vegetable fats as found in corn oil, sunflower oil and safflower oil should also be avoided. Of course, Omega 3 fatty acids in fish oil that have anti-inflammatory effects are beneficial. Japanese women thus have an edge over their western counterparts. It is also worth noting that Mediterranean women who consume olive oil have a far lower incidence of breast cancer.

RESEARCH has established that the risk of breast cancer goes up by 25 per cent in women who consume over one drink a day.

AVOID ALCOHOL

There is a great deal of scientific evidence that provides a clear link between alcohol intake and

breast cancer. Data establishes that the risk of breast cancer goes up by 25 per cent in women who consume more than one drink per day. This finding is supported by the Harvard Nurses' Health Study and dozens of other studies which have looked at large population groups over several years. Particularly susceptible are women genetically predisposed to cancer. Binge drinking is definitely harmful as high levels of alcohol seem to help cancer cells to proliferate. It is worth noting that even a single episode of intoxication and binging is harmful.

KEEP OFF PESTICIDE-LADEN FOOD

Many foods are loaded with pesticides that have oestrogen-like compounds. It is suspected that such compounds could possibly act as triggers for breast cancer. There is a direct link between using oestrogen in hormonal replacement therapy. (for post-menopausal women) and breast cancer. It is best to try and use organically grown foods as much as possible. The use of alternatives such as neem and pyrethrum instead of inorganic pesticides is one way of reducing exposure to the harmful compounds.

AVOID RED MEAT

It has been well documented that women

who eat a great deal of well-done red meat are far more prone to breast cancer. This happens because high temperature cooking produces chemicals called heterocyclic amines (HCA) that induce carcinogens. High temperature cooking occurs when the meat is fried, grilled or broiled. It will be better to choose between stewing, boiling, roasting and baking. And it is best to simply avoid red meat or reduce intake to not over thrice a week. Other measures like trimming excess fat will also reduce HCA formation. Remember to trim the burnt parts when the meat is cooked tandoori style, as it has been exposed to high temperatures. Microwaving or marinating the meat as the initial step of cooking can help reduce the need for high temperature cooking. Cutting the meat into smaller pieces and flipping often while grilling will also reduce the risk of carcinogen formation.

The Indian Express, 7 November, 2009

Don't Shield Kids From Dust And Illness

PRESS TRUST OF INDIA

Wiesbaden (Germany)

PARENTS should not shield their children from coming into contact with dirt and less serious illnesses, according to the Association of German Allergists.

If a neighbour's children has a cold, do not be afraid to let your child play with him. That strengthens their immune system, says Kirsten Jung, a board member of the association.

A medical study conducted by the association has found that children who grew up on farms had fewer allergies than their counterparts in urban areas.

Kids should be allowed to play in grime, advises Jung. In the early years, the body's immune system needs to be stimulated by bacteria so that it can develop, according to the association. That account for why parents should not go over the top when it comes to hygiene. Cleaning the home with chemicals twice a week is too much, says Jung.

On the other hand, ventilating the home regularly with fresh air to reduce the level of house

mites is important, Jung notes. House mites along with fungi are considered the main causes of allergies, DPA said.

She also advises against smoking in a room where a pregnant woman or a baby is present. The association also says that breast feeding a bay for the first four months also reduces the likelihood the child will develop an allergy in later years.

The Indian Express, 8 October, 2006

Sunscreen May Cause Harm

Sunscreen may do more harm than good if it is not used properly, researchers warned on Tuesday. Once it soaks into the skin it can react with sunlight to cause damage below the surface.

Filters contained in sunscreen that keep out ultraviolet (UV) radiation can generate harmful compounds that attack skin cells, says a new study.

It is the first time that filters in sunscreen have been found to act in this way, according to researchers at the University of California, Riverside. But it can be prevented by continually applying new layers of sunscreen to stop sunlight penetrating into the skin. Experts are also urging sunscreen makers to develop new creams that do not soak so deep into the skin. Kerry Hanson, a senior research scientist in the university's department of chemistry, said the problem occurs when sunscreen gets below the surface of the epidermis, the outermost layer of skin.

Hanson said "Sunscreens do an excellent job protecting against sunburn when used correctly." "This means using a sunscreen with a high sun protection factor and applying it uniformly on the skin.

Our data show, however, that its coverage at the skin surface is low, the Ultra Violet filters in sunscreens

that have penetrated into the epidermis can potentially do more harm than good," he said.

"More advanced sunscreen that ensure that The Ultra-Violet filters stay on the skin surface are needed," said Hanson. The latest findings come after a warning last month by British scientists that rubbing in sunscreen can dramatically reduce its effectiveness.

They said this fails to stop dangerous Ultra Violet radiation from the sun penetrating into the skin where it can damage cells and cause cancer.

Rubbing sunscreen into the skin is effectively the same as having no cream at all, researchers say. The only way to stop this is by applying a thick "buttery" layer of sunscreen.

The new study is different in that it says that cream actively combines with the radiation to damage skin. But the advice is essentially the same—keep on applying sunscreen so that there is a layer on top of the skin.

The latest study, soon to be published in the *Journal Free Radical Biology & Medicine*, investigated the production of harmful reactive oxygen species (ROS) by the use of sunscreens.

Daily mail, London

The Times of India, 31 August, 2006

Multi-Vitamin Pills Can Kill, Says Study

Critics Slam the Finding As ‘flawed’

HEALTH HAZARD

Washington: Beta Carotene and Vitamins A and E, antioxidant supplements taken by millions to fight disease, may actually raise the risk of premature death, large study says. But the finding after a review of 68 studies on nearly a quarter of a million people, was criticised as flawed as it was based largely on studies of people who were already chronically ill before they were treated with the supplements.

The study, published in the *Journal of the American medical Association*, relates only to synthetic supplements. Researchers from Centre for Clinical Intervention. Research at Denmark’s Copenhagen University hospital says their study does not relate to fruits and vegetables in every day diets that contain less concentrated levels of antioxidants. While the study does not pinpoint any biochemical mechanism that may be behind the increased death risk, it may be that “by eliminating free radicals from our organism, we interfere with some essential defensive mechanisms”,

it concludes.

Antioxidants are believed to fight free radicals atoms or groups of atoms formed in such a way groups of atoms formed in such a way they can cause cell damage. “Beta carotene, vitamin A, and vitamin E given singly or combined with other antioxidant supplements significantly increase mortality”, the study says.

Antioxidant vitamins, including A, E and C, don’t help you live longer. According to an analysis of dozens of studies. The studies did not cover fruits and vegetables in everyday diets.

It says the increased death risk is about 5% higher than those not given supplements and that figure is probably conservative. It also found no evidence that vitamin C increase longevity and though selenium tended to reduce mortality, more research is needed on that topic. . Balz Frei, director of the Linus Pauling Institute at Oregon State University, says the study and the data studied are both flawed. He says this is because more than two-thirds of the previous research that was examined involved people with heart disease, cancer or other risks who were being treated to see if

the supplements worked. “This kind of approach does not work.”

“Over the years it has become clear from these clinical trials that antioxidants don’t work in disease treatment.” The Natural Products Association, a US supplement trade group, says the study “stands in stark contrast to large actual clinical studies that have not demonstrated any increased risks”. Dr. Daniel Fabricant, vice-president, says reviews of existing studies, called meta-analysis, often work but in this case the process was biased because “there are many other factors that could contribute to mortality that were simply not assessed.”

The Times of India, March, 2007

A to Z of Weight Loss

Simran Sandhu

A FOR attitude. It’ll help you get over the inevitable slip-ups during your weight loss regimen.

BREAKFAST gets your metabolism cracking and helps to stack up energy for the day ahead. Don’t leave home without eating something nutritious like banana, low-fat yoghurt, cereal, last night’s leftovers etc.

CALORIES do count. Get into the habit of reading food labels to help you make healthy choices. Learn more about the calories in the food you enjoy.

DIETING doesn’t work always. What good is losing weight if you gain it right back? Eating crazy food combination or eliminating food groups are not the way to keep flab away. Instead, choose a nutritionally balanced plan to keep you from feeling famished.

EAT REGULAR meals. You should go no longer than 4 to 5 hours between meals. Other-wise, intense hunger can trigger a binge. Some experts believe dieters have better control if they eat several mini-meals.

FIBRE aids in weight loss. Both soluble fibre

(the gummy type found in oatmeal and beans) and insoluble (found in fruits, vegetables and whole grains) are important. Soluble fibre can help lower cholesterol, while insoluble one contain indigestible fibres that add bulk to diet.

GUM chewing may be just what the dentist ordered. Chewing on sugarless gum can help cleanse the mouth of bacteria, satisfy a sweet tooth and reduce the urge to eat.

HEART-HEALTHY foods that are low in saturated and trans fats must be preferred. Enjoy plenty of naturally fat-free, low-sodium fruits and vegetables. Canola, olive and vegetable oils are healthy fats. Eat foods rich in omega-3 fatty acids, like walnuts, flaxseed, salmon and other fatty fish. Choose low and non-fat dairy products, as well as the leanest cuts of meat and skinless poultry. Beans, nuts and whole grains round out the list.

INVEST your precious time in keeping track of your steps each day. The goal is to walk at least 10,000 steps daily to promote weight loss.

JUST do it! Get into a routine of regular physical activity that energises you, burns calories

and improves balance.

KEY to an effective exercise plan is variety. Trying new things will keep you interested and committed.

LOW blood sugar is often the cause of between meal cravings, especially for sweets. Eating meals and small snacks containing lean protein and fibre every few hours helps keep blood sugar levels steady.

MINDFUL eating means taking time to savour every bite. Concentrate on the aroma, texture and flavour of food to be in tune with your body signals of fullness and avoid overeating.

NIGHTTIME snacking can undermine weight loss success. Brushing your teeth after supper will help you make dinner the last meal of the day. If you need a little something, try a stick of gum, a piece of hard candy or a cup of hot tea, which are less in calories.

ONE more scoops one more cookie—“just one more” can add lots of extra calories. Controlling portion is fundamental to weight loss success. Use smaller plates and keep food at the stove instead of on the table at mealtime. When eating outside, order a soup and a salad instead of an entree.

PROTEIN is the “secret sauce” to weight control. Include lean meats, low-fat dairy, beans or nuts in all meals and snacks to help keep you feeling full for hours.

QUIT those old habits that caused you to gain weight. Simple changes, like lightening your coffee with low-fat milk instead of cream, switching to light mayonnaise, avoiding fried foods, can help create healthier eating patterns.

RELY on friends and family to help you in your efforts. Your motivation is at an all-time high when you start a weight loss programme, but after a few weeks, it starts to wane. Let your well-wishers help you get through the rough times.

SUPPLEMENT your food with multivitamin to get all nutrients you need every day.

TRACKING your daily eating patterns and physical activity in a notebook is a powerful motivator to keep you going.

USEFUL dietary guidelines help in making us healthier and thinner. Eat plenty of fruits and vegetables, more whole grains and three servings of low-fat dairy each day (yoghurt, milk or cheese). Limit

saturated and trans fats, sugar and alcohol. Watch sodium content in your diet by eating less processed food. Exercise at least 30 minutes a day.

VOLUMETRIC is the art of eating high volume foods that are super-nutritious, satisfying and low in calories such as fruits, vegetables and soups.

WATER is your body’s preferred form of fluid. Recent studies suggest that we should let thirst determine how much we drink each day. Foods high in water content also count.

XCUSES should be exercised. Don’t put off healthier lifestyle plan until tomorrow. Start today.

YOGHURT is full of nutrients like calcium and protein and makes an excellent snack or mini-meal. The French swear by it, and so should you.

ZING in your step is what you’ll get once you start eating healthy and exercise regularly. Losing as little as 5 to 10 per cent of your body weight can help you feel better and improve your health, so get cracking.

(The writer is a dietician at Mayor World School, Jalandhar).

The Hindustan Times, 28 January, 2007

Do Yourself A Favour

Vegetables, fruit or grain are not sources of often fatal diseases, says Maneka Gandhi, so stop eating meat.

THINK AGAIN

In 2007, the European Food Safety Authority and the European Centre for Disease Prevention and Control published their Community Zoonoses Report, which analysed the occurrence of infectious diseases that can be transmitted from animals to humans. Infection via zoonoses can be acquired either by direct contact with infected animals or by consuming contaminated food products. Consequently, the Efsa has analysed data in human, animals and foodstuffs.

These are the findings of the report:

* Most zoonotic diseases are not through bites and stings. Rabies and Lyme's disease from deer ticks, for instance, are transmitted through bacteria in food—the eating of animal flesh, dairy and eggs according to the Efsa's director of scientific cooperation, Hubert Deluyker.

* Campylobacter infections topped the list of zoonotic disease in the European Union followed by salmonella infections and listeriosis. In 2007,

infections from campylobacter were the most frequently reported zoonotic disease in humans across the European Union, with 200, 507, cases compared to 175,561 in the previous year—an increase of 1.42 per cent. Regarding salmonella, 151,995 people were affected by the bacterium in 2007 compared to 164,011 in 2006.

* In foodstuffs, campylobacter, which causes diarrhoea, cramps and fever in humans, was mostly found in raw poultry meat with an average of 26 per cent of samples showing contamination. In live animals, campylobacter was found in poultry, pigs and cattle. The recorded prevalence of campylobacter-positive broiler flocks was high: 25.2 per cent. The number of pigs with the infections was 56.1 per cent, with some countries showing as high as 78 per cent. Cattle showed an infection of 59 per cent on average but prevalence up to 70.5 per cent was reported by some countries.

* Poultry and pork were reported as the foods most frequently associated with salmonella and on average 5.5 per cent of all poultry meat samples was found to be contaminated. In animal populations, salmonella was most frequently detected in poultry flocks and eggs and egg products were also found to be contaminated.

* The number of listeria infections in humans in 2007 was 1, 554 confirmed cases, listeria also showed the highest mortality rate at 20 per cent, especially among older people and children. Listeriosis is also very dangerous to pregnant women as it can cause foetal infections, miscarriage and stillbirths. Listeria was found in ready-to-eat foods, most often in smoked fish and other fishery products, followed by meat product and cheese.

* Some zoonotic infections are extremely important as they cause serious illnesses or have a higher mortality rate, despite the relatively low number of cases. This is the case, for instance of Vero-toxigenic Escherichia coli (VTEC), which accounted for a total of 2,905 human infections in the European Union. VTEC was most often reported from cattle meat.

* The number of yersiniosis cases in humans in 2007 was 8,792, with the bacterium being found mostly in pigs and pork. The two parasitic zoonotic diseases, trichinellosis and cehinococcosis, were reported in 779 and 834 human infections respectively.

* There were 120 cases of tuberculosis caused by Mycobacterium bovis or the bacteria in milk, with Belgium, France and Germany showing infected herds of cattle. In fact, Ireland and the UK reported

the highest prevalence (4.4 per cent and 3.3 per cent, respectively) in their national herds. There were only three cases of rabies and no disease resulting from any other direct form of contact with animals.—Why am I giving you these European Union figures? To prove my point: diseases do not come from touching or keeping animal. Whatever figures the EU has—after all their monitoring and their careful checks of every farm, factory and the slaughterhouse—we in Southeast Asia have a thousand times more because we have no checks at all on the health of the animals we eat. We are spending major portions of our national budget on treating human disease—with no improvement at all. We spend nothing at all on treating animals or even monitoring them. All these listed above are major diseases and we are inflicting them on ourselves by continuing to eat something that is unnatural. Not one of these diseases exists or is transmitted through vegetables, fruit or grain. Do yourself and your poor country a favour and stop eating meat.

(To join the animal welfare movement contact gandhim@nic.in)

The Sunday Statesman, 8 March 2009)

Overweight Kids May Face Foot Problems

KIDS who carry excess pounds may be doing permanent damage to their feet, a group of foot and ankle surgeons warns. “When there is an increased amount of weight and stress being placed on the foot, that can cause some significant changes in foot structure”, Dr. Darryl Haycock, a foot and ankle surgeon in private practice in Lima, Ohio, told Reuters Health.

Children’s feet aren’t fully developed until the age of 14 or 15 for girls, 15 to 17 for boys, meaning their foot bones are “easily mouldable”, Haycock added. As few as 15 to 20 extra pounds can contribute to flattening of the arches and inflammation of the growth plate in the heel, according to Haycock, who says he used to only see this type of foot pain in very active children but is seeing it increasingly in overweight kids.

It’s difficult to determine whether children are obese because they have foot problems in the first place, which make it painful for them to be active, or whether the obesity is causing the changes in foot structure, Haycock added.

“It’s the proverbial chicken and the egg thing,” he said. Complicating matters is the fact that many children are born with foot deformities that can reduce their activity levels, such as flat feet or hammer toes.

But it is clear that foot problems in obese kids can cause a vicious cycle, with the foot pain making it more difficult for them to be active, which makes it more difficult to trim down, Haycock and his colleagues point out.

Treatment of foot problems generally begins with conservative therapies such as custom-made shoe inserts, known as orthotics and physical therapy. If such approaches don’t work, surgery to correct the problem may be recommended.

The Hindu Times, 4 March, 2007

Check That Cholesterol

FOOD: According to Delhi-based nutritionist Ishi Khosla, it's important to consume a combination of foods which are high in essential fatty acid (EFA), fibre, vitamins, minerals, folic acid enzymes. These help in lowering bad fats (LDL and Triglycerides) and in improving good fats (HDL) Some examples are.

- * Consume 2-3 walnuts daily.
- * Include garlic in your diet. Crush it before cooking to retain its properties.
- * Alternate between one-two tablespoonful of flax seeds, sesame seeds and methi seeds every week.
- * Try half-a-cup to one cup of a combination of sprouts like urad, chana, moong and alfalfa.
- * Six-eighths servings of raw vegetables and fruits (with skin) on a daily basis are a must.
- * Replace refined grain with whole grain.
- * Use different cooking oils, like mustard oil, olive oil and rice bran oil as your cooking medium.
- * Two-three times a week, eat fresh water fish or deep sea cold water fish
- * Completely avoid or have minimum sugar, salt and alcohol. Say no to junk food.

EXERCISE: Fitness expert Leena Mogre of Mumbai says that regular exercise improves your lipid profile by burning up fat in such a manner that there

is reduction in the percentage of bad fat and increase in good fat. She recommends a weight-training programme thrice a week and cardio combinations on other three days, with one day of rest. First-timers should check with their doctor first and then get a fitness assessment done by a trainer.

In cardio exercises, you can try the treadmill, swimming, dancing, cycling, jogging, brisk walking, power yoga or any other physical activity. Just do it for 20-45 minutes at a stretch, thrice a week.

YOGA Mumbai-based, yoga guru, Ravi Dixit recommends Vajrasan, Supt-Tadasan, Ardh-Halasan, Makrasan, Kativakrasan, Bhadrasan, Gomukhasan Mandukasan, Parvatasan, Bramhamudra, Simhamudra, Jivhabandh and Chakrasan. When these *asanas* are practised regularly, while vital organs like the liver, kidney and pancreas are massaged, the right quantity of hormones are also secreted, thereby purifying the body and maintaining the lipid profile. Pranayam and meditation are also suggested as an accompaniment to these *asanas*. Pranayam teaches one how to breathe slowly, while meditation makes the mind calmer and positive and emotionally well-balanced. When vital organs function at a relaxed pace, minimum toxin is produced. As a result, cholesterol remains under control.

The Times of India, 4 March, 2007

The Wonder Bulb

ISHI KHOSLA is a former senior nutritionist at Escorts. She heads the Centre of Dietary Counseling and also runs a health food store. She feels that for complete well-being, one should integrate physical, mental and spiritual health. According to her, “To be healthy should be the ultimate goal for all.”

GARLIC, MEMBER OF ONIONS, leeks and chives family is widely used in many culinary applications owing to its strong aroma and flavor. Besides being a popular ingredient of almost all cuisine, it has been long known for its therapeutic benefits. The healing power of garlic dates back to thousands of years—Ancient Egyptian healers prescribed it to build physical strength, Russians nicknamed it “Russian Penicillin” as in both world wars Russian soldiers carried garlic cloves in their pockets to treat wounds, Greeks used it as a laxative, Chinese used it to lower blood pressure and in the middle ages, eating liberal quantities of garlic was credited with providing immunity to plague. It is indeed exciting to discover the wonders of nature’s tiny bulb.

Garlic is loaded with nearly 100 active chemical

compounds including several potent antioxidants (compounds that reduce wear and tear of our body. The constituents contributing to its use in cooking and as a protective agent can be credited to a large extent to its numerous sulfur containing compounds, besides amino acids and a wide variety of vitamins and minerals. The most important of all these compounds is allcin, a sulfur-containing compound.

It is still not very clear, how all garlic constituents work in the body, however, it certainly known for its antibiotic, anti-clotting, decongestant, anti-cancer, anti-inflammatory, anti-hypertensive (lowering blood pressure), anti-fungal, anti-viral, anti-oxidant and even cholesterol lowering properties.

Research has shown that garlic exhibits cardio-protective role as it helps in lowering blood cholesterol, especially the undesirable fraction of serum cholesterol, low-density lipoprotein (LDL) and serum fat. Fating half a clove of garlic a day may lower blood cholesterol by 9 per cent, provided taken regularly. “Ajoene”, one of the breakdown products of allicin, may reduce the risk of heart attacks by preventing formation of blood clots. Research validates the claim that garlic significantly lowers high blood pressure and inhibiting platelet clumping. It is interesting to note that regions

with high meat consumption also tend to eat more garlic.

The antithrombotic (inhibition of platelet aggregation) and antihypertensive (lowering blood pressure) properties have been attributed predominantly to allicin, a sulfur compound found in garlic. Garlic (both fresh and supplements) may enhance the effect of blood thinning medications. It boosts the body's natural clot dissolving mechanism. Garlic also reduces inflammation by blocking the formation of agents (prostaglandins) that induce it. Garlic sautéed in oil produces still other sulfur compounds (vinyldithins), which are bronchial relaxers (open air passageways in lungs). Garlic reduces the tendency to form blood clots; although the conjecture that garlic decreases the risk of cardiovascular disease has been challenged.

“Garlic can prevent formation of harmful cancer causing agents, used as a preservative in processed meats, thus lowering the risk of developing stomach cancer.

Garlic can prevent formation of harmful cancer causing agents (dietary nitrites from nitrosamines), used as a preservative in processed meats, thus

lowering the risk of developing stomach cancer. “Allylsulfides”, sulfur compounds found in garlic increase the production of detoxification enzymes that help breakdown cancer causing compounds and toxins and enhance their removed from the body. Garlic has been shown to protect against liver, lung and breast cancer. Other compounds in garlic seem to limit tumor cell growth. Research has shown that consuming on average 6 or more cloves a week lowered the risk of colorectal cancer by 30 per cent and stomach cancer by 50 per cent. The antioxidant property of garlic also helps boost the immune system by increasing natural killer cells.

Some of the most known traditional garlic therapies include:

Boiled garlic: Asthma

Garlic mashed, mixed in vinegar and then gargled: Tonsillitis

Boiled garlic mixed with honey: Blisters

Strong Garlic infusion rubbed on temples: Headache

Getting the best from the garlic: To maximize garlic's nutritional power, chop or crush it 10 minutes before cooking, this allows allicin (sulfur compound) and its

potent derivatives to be fully activated.

Eat at least 3 cloves of garlic every day, raw garlic is best, cook for not more than 10 minutes.

Garlic usually does not cause side effects, but in sensitive people it may cause allergic symptoms. Don't miss out on the benefits of garlic because of its strong odour, simple chewing parsley/coriander/after eating it will do the trick or else munch a coffee bean or chew few anise or fennel seeds.

No wonder, the Muslims were know to have said "*Lahsan ka khana aur garam paani ka nahana, Hindu kafir ko mat bataanaal!*"

(The Indian Express, March 4, 2007)

Healthy Mr. Carotenoid

These colourful summer fruits pack amazing benefits. From keeping you cool to reducing the risk of heart disease. From repairing tissues in children, to protecting you against prostate cancer.

SOURAV ROY

FINALLY, GET RIDE OF the boring apples and bananas. And I do think I have waited long enough to sink my teeth into a sweet, succulent honeydew melon and drool over nuke-sized papayas and mangoes.

Yes, it's that of the year when the delicious and the colourful hits you. The mash-melons, watermelons, muskmelons, oranges, mangoes, lukaats, sweet lemons, raspberries, strawberries and what else bright and flashy you have, announce their arrival. There's so much to choose from and so little to leave. Welcome summers.

But at the core of this whole business of catching our eyes, tickling our taste buds and optimizing the health benefits of each of these yellow, red, and orange fruits, is a group of intense red and yellow pigments, the carotenoids. There are a simple collection of photosynthetic units in a plant that helps trap light particles. And while it traps the photons for the stems and the shoots, it dispels the darkness within the human body, when consumed as a fruit.

“The bright hue to these enticing summer fruits and their cosmetic appeal is due to a heavy concentration of carotenoids. And the brighter the fruit, the better is the possibility of it being grabbed,” says Dalit kaur, senior dietician at Delhi’s Escorts Heart Institute and Research Centre. “Plus it doesn’t just look good. Because it does a whole lot of good to your body. Fruits that are carotenoid-rich such as oranges, melons, mangoes and red berries act as anti-oxidants and anti-carcinogens. That translates into a longer life span, with much higher immunity against cancer.”

Fruits such as mangoes, melons and papaya also contain flavonoids, a pigment known to exhibit anti-viral and anti-inflammatory properties. However, the amount of carotenoids and flavonoids in these fruits depends on the ripened condition of the fruit and the method of its preservation. “Carotenoids and flavonoids catalyse the absorption of vitamin C in the body. These are stored in the liver, straight and are time-tested remedies for prostate and breast cancer,” informs Kaur.

Carotenoid-rich fruits have benefits galore, right from slowing the aging process to reducing the risk of cataract and other vision disorders, to acting as an effective anti-coagulant for cardiac patients, these

carotenoids have relief packed in every bite of the fruit. Hot flushes that women undergo during menopause get a dampening cool effect from the carotenoids in watermelons, mangoes and papayas. People suffering from diabetes too can much to their fill, as carotenoid-rich fruits belonging to the melon family have very low fruit sugar and about 90 per cent water content.

Dietician Shikha Sharma Says that a summer fruit is a complete packaged drink by itself.

It’s packed with minerals, fruit sugar, isotonic thirst quenchers and a natural go-slow mechanism that balances the metabolic activity of the body,” she says. “On a scale of 0-100 a whole fruit rates at 100 and packaged fruit juice at 1. Everything else you have falls in between.”

In plain talk, that should mean there’s nothing better than a whole summer fruit. And if it’s loaded with carotenoids, then rest assured, you’re going gung-ho.

ORANGE YOU CURIOUS TO KNOW?

Carotenoids are organic pigments that are naturally occurring in plants and some other photosynthetic organism like algae, some types of fungus and some bacteria. There are over 600 known carotenoids. Probably the most well-known carotenoid is the one that gives this group its name, carotene, found in

carrots and responsible for their bright orange colour.

In photosynthetic organisms, carotenoids play a vital role in the photosynthetic reaction centre. They either participate in the energy transfer process, or protect the reaction centre from auto-oxidation. In non-photosynthetic organisms, carotenoids have been linked to oxidation-preventing mechanisms.

* Carotenoids enhance the vertebrate immune system. People with high beta-carotene intake are known to significantly reduce the risk of lung, prostate and breast cancer, ageing and vision disorders.

* Oranges and lemons provide effective relief for women's menstrual and pre-menopause disorders.

* Papaya prevents blood clots in the arteries and blood vessels.

* Watermelons, muskmelons, honeydew melons refurbish a dehydrated body with isotonic salts.

* Lukkaat is a natural cell and tissue repairer for growing children.

* Carotenoids also help maintain the integrity of skin and mucous membranes. This act as the body's natural barrier to bacteria and viruses.

The Indian Express, April 9, 2006

Depressing Facts About Dieting

ISHI KHOSLA

MOST OF US HAVE TRIED dieting at one point in life or another, for various reasons. In fact, the practice is as old as 17th and 18th centuries. However, there's no denying that the most common objective of dieting is losing excess body fat. But did you know that unsupervised dieting might lead to weight loss without fat loss? And believe it or not, depression is one of the common features of unregulated dieting.

NUTRITIONAL IMBALANCE

Any diet that fails to meet minimum nutritional requirements not only threatens physical fitness but also leads to psychological problems. The fact is that there is no 'quick fix' when it comes to weight loss. Various deficiencies might hamper your health in more ways than you can imagine.

DECREASED PROTEIN INTAKE: The brain relies on proteins, the only source of amino acids that produces mood-enhancing chemicals. Diets that do not provide adequate protein may not be able to provide:

DOPAMINE/NOREPINEPHRINE: A natural energizer, it also enhances focus.

GABA (GAMMA AMINO BUTYRIC ACID):
it's a natural sedative.

ENDORPHIN: A natural painkiller.

SEROTONIN: A mood stabilizer, it also promotes good sleep. This is the easiest deficiency to develop. When these chemicals are out of balance, the result is pseudo emotions. Such false moods can be as distressing as those triggered by abuse, loss or trauma. They can drive us to overeating.

DEFICIENCY IN FATTY ACID: This deficiency can lead to unhealthy behaviours and depression regardless your weight. Studies suggest that an imbalance in the ratio of essential fatty acids (EFAs)-n-3 and n-6 and/or a deficiency in n-3 fatty acids, may lead to depressive symptoms. Researchers at the University of Minnesota reported that low fat diets tend to decrease the level of beneficial omega-3 fatty acids, particularly EPA (Eicosapentaenoic Acid) and DHA (Decosahexaenoic Acid) found in fish oil. They are crucial for the proper functioning of the nervous system. Several studies have found an association between low blood levels of EPA and DHA and an increased risk of depression, violence and

suicide.

Make small changes in caloric intake with smaller portions and healthier options.

SODIUM: Numerous diets advocate salt-free meals. While it is true that excess salt is harmful, going on a salt-free diet to lose weight can prove to be counterproductive.

To begin with, when Sodium is restricted water is lost and not fat. Secondly, Sodium in optimum levels is needed for proper functioning of the nervous system and a dip in their level can lead to depression, mood changes and weakness.

OTHER NUTRIENTS: Zinc, Magnesium Phosphorus and Carotene deficiency is another consequence of abnormal food intake. This also leads to mood disorders and depression.

Abnormal liver function, nutritional dwarfing and other psysiological abnormalities like delayed puberty and growth failure are some of the common results of unsupervised dieting.

GET IT RIGHT

We have been talking about how dieting is not the best way to lose weight. So, what is the right way

to shed off those extra kilos?

BALANCED DIET: choose from different food groups to get all the nutrients. These include fruits and vegetables: low fat dairy products: lean meat, fatty fish, soya, nuts, oilseeds and other foods rich in proteins; whole grains, including whole grain breads and breakfast cereals.

SMALL FREQUENT MEALS: Make small changes in caloric intake with smaller portions and perhaps some healthier substitutions.

ACTIVE LIFESTYLE: Increased physical activity, a regular exercise regime and cutting down on pastimes that aren't very active.

The Indian Express, 29 October, 2006

Curd Almighty

MEGHA CHAWLA

The humble yogurt is the food that heals. It is good for bones, lowers the risk of colon cancer and coma and ever guarantees great looks.

CURD'S IMAGE is getting better. According to the *American Journal of Clinical Nutrition* supplementing curd to your meals once a day is not only good for health but also guarantees great looks.

Curd, considered one of the best functional foods, is rich in calcium, protein and potassium. Mix it with fruits or lime juice and it is a tasty, nutritious scoop.

As far as its curative properties are concerned, curd has a nutritive content similar to fresh milk, but is more therapeutic. Bacteria, which convert milk into curd and predigest milk protein, inhibit the growth of hostile or illness causing bacteria in the intestinal tract and promote beneficial bacteria needed for digestion. The friendly bacteria facilitate the absorption of minerals and aid in the synthesis of Vitamin B.

According to the research conducted, eating curd regularly can improve and strengthen one's defence system. And since it contains large amounts of phosphorus, it is good for people suffering from or at risk of osteoporosis.

The research also suggests that sphingolipids, conjugated linoleic acid and butyric acid found in curd can play a role as anti-cancer agents.

The intestine-friendly bacterial cultures in curd can keep colon healthy and lower the risk of colon cancer. Also yogurt is a rich source of calcium, a mineral that contributes to colon health and decreases the risk of cancer.

Curd also brings relief to people suffering from gastro-intestinal disorders like constipation and diarrhoea. Since it contains less lactose and more lactase, curd is usually tolerated by healing intestines and is a popular “healing food”. Not surprisingly, many pediatricians recommend yogurt for children suffering from various forms of indigestion. Research show that children recover faster from diarrhoea if they eat curd.

The research also says that it is good to supplement curd with meals if one is on antibiotics. Curd’s friendly bacteria minimize the effect of antibiotics on one’s body.

Dr. GC Vaishnava, senior consultant and coordinator, internal medicine, fortis says, “The live bacterial cultures in curd replenish intestines with helpful bacteria before the harmful ones take over.” What is the prescribed dose?” I usually prescribe a daily dose of curd while a person is taking antibiotics

and for two weeks thereafter”, he says.

Suffering from insomnia? Have curd, it can induce sleep. Besides that, excessive liberation of ammonia—which is one of the major causes of coma in patients suffering from hepatitis and severe jaundice—can, be prevented by a liberal intake of curd every day. The lactic acid organisms can counteract the formation of ammonia.

Besides its health benefits curd is also considered one of the best aids to natural good looks. Curd, when supplemented with fruits, supplies the nerves and skin with healthy ingredients. Instead of mayonnaise, have thick curd it will keep your skin glow.

How to add more curd to your daily diet, here are some healthier alternatives. Replace mayonnaise and salad dressings with thick curd. Non-fat, plain curd contains less than 10% of calories. Curd works well for many dishes, including potato salad, pasta salad, dips and appetisers.

Use curd as a healthy alternative in baking recipes. Plain curd can be a great substitute for sour cream in recipes for waffles, pancakes and muffins. Make dips with curd instead of sour cream. One can use curd cheese than cream cheese. Use curd extensively to marinate meat and poultry.

The Indian Express, 14 January, 2007

New research shows black soya prevents diabetes and helps lose weight, magnifying the goodness of its yellow cousin

Thin Beans

ISHITA YADAV

BOUNCING BEANS ISN'T just a turn of phrase, at least as far as soy's is concerned New research shows that black soya can prevent diabetes, curb cholesterol and help obese people lose weight. While yellow soya is the most common variety eaten across the world, black soya is used as a pulse in several parts of India and more widely used in all courses of Oriental cuisine.

In a study published in the Journal of Science of food and Agriculture, a team of Korean researchers studied the effects of black soya in 32 rats. The researchers allowed the rodents to stuff on a fatty diet supplemented with various levels of black soya.

Two weeks later, the rats that got 10 per cent of their energy from black soya gained half as much weight as those in the control group and their total blood cholesterol and LDL (bad cholesterol) levels fell by 25 per cent and 10 per cent respectively. Other than

that, soya beans are also a good source of protein.

The researchers also found that black soya beans are more effective in lowering fat and cholesterol levels as compared to the yellow ones, which help reduce weight as well.

“Soya is a good source of complex carbohydrates. It is low in fat and high in fibre”. says Dr. Sakshi Chawla, Chief Dietician, Fortis.

LEAN FACTS

- * Soya is a good source of protein and fat.
- * It can also be used to make dairy products such as milk as well as other dairy replacements. Tofu for instance.
- * Is often used as a meat substitute and referred to as vegetarian meat.

Foods containing black soya also helps reduce the risk of a coronary heart disease. “The polyphenols that are found in the black soya beans help in lowering cholesterol. It's anti-oxidant properties help in preventing against heart diseases and also diabetes,” she adds.

Soya beans reduce the levels of harmful blood fats that are involved in heart diseases, stabilizes blood

sugar levels and its antioxidant properties help in preventing cancer.

“Black soya beans are also rich in fibre and low in fat. This helps cut cholesterol and prevent obesity. It also lowers blood sugar level,” says Dr. Chawla. However, black soya beans are not enough to stop one from developing diabetes, Dr. Chawla informs. Regular exercise and a healthy, balanced diet are also required to avoid diabetes and other health problems”, she adds.

Soya is also a good source of iron. Apart from this, it is an excellent source of omega-3 fatty acids. Soya also reduces inflammation and thus plays an important role in preventing cholesterol from clogging arteries.

“Soya has every nutritional benefit possible. It is an important source of a lot of minerals and is a nutrient-rich food. It should be made an important part of daily diet,” says Dr. Chawla.

The Indian Express 4 March, 2007

Two per cent of the Indian population is infected with tuberculosis, making it about 20 million patients. There are two deaths occurring every three minutes from TB in the country

The TB Terror

JAGDISH KUMAR

Tuberculosis, commonly called TB, is an illness that usually affects the respiratory system. However, it can infect any part of the body. It spreads by close contact through coughing and sneezing thereby adopting the airborne route to get the primary infection. The ongoing AIDS pandemic has worsened the scenario, as immunosuppressed HIV infected persons are highly susceptible to this bacterium.

The co-morbidity of both these diseases is so alarming that invariably it leads to fatal consequences. This is the most common opportunistic infection among people living with HIV. In 2007, WHO recommended that countries with high co-infection rate should develop TB-HIV collaborative activities through Integrated Counseling and Testing Centers (ICTC).

Even today, 129 years after its discovery,

tuberculosis remains one of leading causes of death of several million people, mostly in third world poverty-stricken developing countries. The gross estimation of WHO is that two billion persons, one-third of world's populations, are infected by this bacterium. The number of cases had become so enormous that in the year 1993, WHO had to declare a state of Global Emergency on this disease.

Our country is no exception to this epidemic logical data; where 2 per cent population is infected, amounting to about 20 million people. It is one of the leading causes of mortality in India—330,000 deaths each year—nearly 1,000 every day, which amounts to 2 persons dying every 3 minutes. These deaths can be prevented with proper diagnosis and treatment. Patients can be cured and the battle against this scourge can be certainly won.

This is one of the curable diseases if detected timely and managed properly. The standard recommended length of drug therapy is six months, which may be extended in some of the unusual cases. However, if there is delay in establishing diagnosis, irreparable damage takes place. Hence it may not be

curable at an advanced stage.

Sometimes, even if diagnosis is timely made, the patient may not take the full course of treatment with prescribed doses. It turns into multidrug-resistant tuberculosis (MDR-TB), where first line drugs (isoniazid and rifampicin) become ineffective. The situation is already so grim and above all there is now an emerging threat of extensively drug-resistant tuberculosis (XDR-TB) since 2006, where patients do not respond to the first line as well as the second line of anti-tuberculous drugs (fluoroquinolones and at least 1 of 3 injectables—capreomycin, kanamycin and amikacin). Such cases are now being reported from India also. The XDR-TB has really posed a big challenge before the medical fraternity and the ailing community.

In our country, the National TB Programme (NTP) was started in the year 1962 and the Revised National Tuberculosis Control Programme (RNTCP) IN 1997, after pilot testing from 1993-1996. It included Directly Observed Treatment Short course (DOTS), which is being implemented to tackle this menace. The WHO-recommended DOTS strategy was launched

formally through the RNTCP. Since then DOTS has been widely advocated and successfully applied. The RNTCP has covered the entire population of the country by March 2006. This programme has achieved the global target of 70 per cent case detection for the first time while maintaining the treatment success rate of more than 85 per cent in our country.

The gross estimation of WHO is that two billions persons, one-third of world's population, are infected by this bacterium. The number of cases had become so enormous that in the year 1993, WHO had to declare of a state of Global Emergency on this disease.

The Ministry of Health and Family Welfare, Government of India, has now come up with the DOTS-Plus programme, which refers to DOTS that add five essential components for MDR-TB diagnosis as well as treatment. These are:

- * Sustained government commitment;
- * Accurate timely diagnosis through quality assured culture and drug susceptibility testing;
- * Appropriate treatment utilizing second-line drugs under strict supervision;

- * Uninterrupted supply of quality assured anti-tuberculous drug; and
- * Standardized recording and reporting system.

There is full integration of DOTS and DOTS-Plus activities under the RNTCP so that patients with MDRTB are both correctly identified and properly managed under the prescribed re-recommendations. In the RNTCP DOTS-Plus vision by 2012, it is aimed to extend these services to all smear positive retreatment cases and new cases who have failed an initial first line drug treatment and by 2015, these services will be made available to all smear-positive pulmonary tuberculosis cases registered under the programme.

KEY FACTS

* TB is one of the leading causes of mortality in India—killing 2 persons every three minute, nearly 1,000 every day.

* The strategy of Directly Observed Treatment, short course (DOTS) is based largely on research done in India in the field of TB over the past 35 years.

* Since 1997, after successful piloting DOTS has been implemented in India as the Revised National Tuberculosis Control Programme (RNTCP).

In the RNTCP, the proportion of TB cases which are confirmed in the laboratory and the cure are both more than double that of the previous programme.

* The operational feasibility of DOTS in the Indian context has been demonstrated, with 8 out of 10 patients treated in the programme being cured, as compared with approximately 3 out of 10 in the previous programme.

* Multidrug-resistant tuberculosis (MDRTB) is a result and symptom of poor management of TB patients. DOTS have been shown to prevent the emergence MDRTB and to reverse the trend of MDRTB in communities in which it has emerged.

* TB is the most common opportunistic infection among people living with HIV.

* Revised National Tuberculosis Control Programme (RNTCP) has covered the entire population of the country by March 2006.

* Every patient who is cured stops spreading TB and every life saved in a child, mother, or father who will go on to live a longer, TB-free life

(The Tribune, 24 March 24, 2011)

Together We Can Eliminate It

The 24th of March every year is observed as World Tuberculosis Day all over the globe. This occasion provides an opportunity to the governmental as well as non-governmental organizations to create public awareness programme highlighting the magnitude of the problems and devising solutions related to the ongoing pandemic of tuberculosis entailing the strengthening of the control measures.

World TB day commemorates the historical date in the year 1882 when Robert Koch announced the discovery of Mycobacterium tuberculosis, the causative bacterium of tuberculosis, in one of the meeting of doctors in Berlin (Germany). This used to be was considered a dreaded disease at that time. It used to kill millions of people, as the case fatality was 1 out of every 7 persons, not only in Europe but other continents as well because neither its cause nor any specific treatment was known. This breakthrough discovery on this day paved the way for diagnosing and later on curing the ‘incurable disease’ of that era.

For the next hundred years, this day was not remembered in any capacity. However, in 1982,

while commemorating the 100th year of Koch's discovery, the first World TB Day was observed by the International Union Against Tuberculosis and Lung Disease (IUATLD), which was subsequently joined by the World Health Organization (WHO). The basic idea of the international event was to educate the public at large about the devastating medical and economic consequences of tuberculosis, its effect on the developing countries and its overall continued tragic impact on global health.

Every year a theme is decided for this day focusing on to how to get rid of this disease and throughout that year a concerted worldwide campaign is initiated to achieve the set goal. The theme of this year is 'TB Elimination : Together we can' which is more than a slogan and its campaign will be sustained focusing on to people everywhere who are doing their part on the move against tuberculosis: transforming the fight towards elimination.

It is a reminder of the collaborative efforts on eliminating tuberculosis by educating health care workers and volunteers who play a crucial role in identifying symptoms of this disease. It is about

highlighting lives and stories of people affected by tuberculosis: women, men and children who have taken tuberculosis treatment; nurses; doctors; researchers; community workers—anyone who has contributed towards the global fight against this dreadful disease.

Every patient who is cured stop spreading tuberculosis and every life saved is a child, mother or father who will go on to live a longer, disease free life. WHO is working to cut tuberculosis prevalence rates and thereby deaths by half by the year 2015. Eventually by 2050, the global incidence of this disease is expected to be less than or equal to 1 case per million population per year. The day is not far when we will be able to celebrate the occasion, as the disease will ultimately be eliminated from the face of the globe. Our vision is a world free of tuberculosis.

—JK

(The Tribune, March, 24, 2011)

AYURVEDA & YOU

Healthy Gut Can Help Lead Disease Free Life

DR. R. VATSYAYAN

The scientific term for the entire “tube” running from mouth to the anus is the alimentary canal. Gut is a conversational term used for the stomach, intestines and the related structures. It is generally seen that a healthy gut works silently whereas one of the first signs of ill health is a gut that makes its presence felt. In other words, gut feelings are a reliable indicator of many diseases.

Every morsel of food we ingest makes a journey passing through esophagus, stomach, duodenum and small and large intestines. According to ayurvedic beliefs, mouth and stomach are dominated by “kapha” whereas the duodenum and the intestines till the rectum are respectively controlled by “pitta” and “vata”. The food in its passage from mouth through the gut is mechanically crushed, chemically simplified (digested) and then transferred across the intestinal wall into the blood (absorbed.)

This whole process may look simple but, to the

contrary, it is one of the most complex operations of the human body. Digestion requires various enzymes and secretions emanating from the stomach, liver and pancreas and its main process along with absorption is completed in the small intestine. Undigested and un-digestible food is delivered to the large intestine where bacterial metabolism, gases and water in the residue matter play an important role. The digestion and absorption are highly coordinated activities, which are additionally controlled by the nervous and endocrine systems.

If we eat the right amount and right type of food and that too at right time and in a right way, the gut works properly. The efficient functioning of the gut nourishes the body. That is why the health of the gut is indicative of the general health of an individual. Centuries ago Acharaya Charak gave us the dictum that in the pathogenesis of any disease a bad gut must have played its role. Just as the gut reflects the health of the whole body, the well-being of our digestive system depends on our lifestyle as a whole.

Realizing the true purpose of food. We should select what is good for the body and eat just the right

amount—neither too much nor too little. The largest meal, though not exceeding the required quantity, should be lunch. Breakfast and dinner can be light, and eating between the meals should be limited to some fruit and light snacks or a healthy drink. Intake of too much tea and coffee disturbs the gut and is a major reason for acidity, gas formation and dyspepsia.

Like the good assimilation of food, proper evacuation is also equally important to our general health. Apart from a diet that is balanced in nature and mostly fibrous, the clearance of bowels further depends on other lifestyle factors such as regular physical activity, adequate sleep and mental peace. Frequent use of laxatives spoils the condition of the gut.

Ayurveda says that good health depends on a good functioning gut.

The writer is a senior ayurvedic physician based in Ludhiana.

The Tribune, 17 March, 2010

Fat Is In The Fire

When Cooking Oil Can Be A Health Hazard

YP Gupta

The level of trans-fat in Indian vanaspati brands is five to 12 times higher than Denmark's limit of two per cent, according to a recent study conducted by the Centre for Science and Environment (CSE). Trans-fat is harmful; it accumulates in the body and increases the risk of heart attacks and diabetes. It raises the levels of bad cholesterol (LDL) and triglycerides in the blood.

Studies by the CSE on different brands of refined edible oils—soyabean, sunflower, groundnut, mustard, coconut, and palm. Etc.—has shown that these contain trans-fats within the permitted limits and are thus safe. Only rice bran oil and safola gold blended oil slightly exceed the safe trans-fat limit.

It is the cheap cooking oils which are posing a serious threat to the health of a large section of the population. A variety of these oils containing impurities are commonly sold in markets all over the country.

Such oils are an important part of our diet as a cooking medium. Their demand has been rising with the increase in population. With economic prosperity and the rise in the per capita income, their consumption is expected to increase. The daily intake of fat should

not contribute more than 15-20 per cent calories to the diet.

ADULTERATION

Argemone oil is cheap and commonly used for adulteration of other oils like groundnut. This oil is unfit for human consumption due to the presence of an alkaloid and sanguinarine. Argemone Mexicana seeds are rich in this oil. These weeds commonly grow in the mustard fields. Mustard oil gets contaminated once Mexican poppy gets mixed with the mustard seeds.

Agremone oil poisoning can cause dropsy. Instances of this disease have been reported from Delhi, Rajasthan, Gujarat, UP and some other parts of the country.

Any adulteration must be strictly dealt with in terms of deterrent punishment under the law. Also, people should be made aware of the harmful effects of cheap cooking oils.

The disease has been attributed to the consumption of mustard oil contaminated with agremone oil containing sanguinarine alkaloid. The disease is characterized by symptoms of nausea, vomiting, diarrhoea, swelling of hands, legs, face and eyes, pitting edema of legs and erythema of exposed parts of the face and limbs. In the advanced stages,

the symptoms are low blood pressure, breathlessness with lung congestion, increased palpitation and heart enlargement. An excess can lead to cardiac arrest and death.

The Tata Memorial Cancer Centre, Mumbai, has found that argemone oil is not carcinogenic but acts as a co-carcinogen with mutagenic properties. Cooking oil from the market have been found to contain up to one per cent of argemone oil. Experiments on monkeys have shown that 0.05 ml. of agremone oil per kg. body-weight is sufficient to cause toxicity.

A tolerance limit for agremone oil in edible oils has been prescribed as 0.01 per cent. Removal of alkaloid makes agremone oil free from its toxic effects, thereby making cooking oil safe for human consumption.

Mustard and rapeseed are commonly cultivated in UP, Punjab, Rajasthan, Haryana and Madhya Pradesh. Rapeseed oil is extensively used for cooking in Canada and certain continental countries. Oil from these seeds contains 40 to 45 per cent erucic acid, which causes myocardial fibrosis (inflammation of the heart muscle) among habitual consumers. Marked changes in the myocardium have been detected in rats and rabbits when fed with rapeseed oil. Erucic acid

was found localized in the heart muscles of animals that are fed on mustard oil. Canada and Sweden have succeeded in developing rapeseed strain (Canola variety) with zero erucic acid.

Overheating of oils during cooking has a deleterious effect on human health as it decomposes these cooking oils into unidentified polymerized products, which could be potentially carcinogenic and could cause cancer on inhalation during cooking or on consumption of the residues. Through the process of frying, cooking oils, in general, form oxidized products containing higher levels of poly-unsaturated fatty acid and peroxide, which are a risk to consumers. However, routine, cooking hardly produces deleterious effects.

Some minor oilseeds (sal, mahua, mango kernel etc.) are also being exploited these days for indigenous use. But oils from these sources are not free from toxic factors, which are a great risk. Sal seed oil contains toxic epoxy and hydroxyl glycerides. It is used in the tribal areas. Mango kernel contains as astringent principal.

RICE BRAN OIL

Rice bran oil could not be fully exploited because free fatty acids increase when the oil is not immediately extracted after milling due to the presence

of lipolytic enzyme in rice bran. This enzyme becomes active after milling. These free acids cause rancidity. Its colour, high melting point and presence of gums are the other constraints. Japan has successfully overcome these difficulties. The CFTRI (Mysore) has developed a process to prevent bran rancidity.

Palm oil is a cheap variety being commonly used these days as a cooking medium by the poor and the middle class. The crude oil is coloured. Its strong smell limits its use. This oil is largely imported as a relatively cheap cooking medium. Hydrogenated palm oil has a better market value.

It is risky to use a cheap cooking medium. It is important to make a comprehensive toxicological evaluation of cooking oil (both conventional and relatively less exploited) on the one hand and conduct a check on adulteration and removal of toxicants on the other.

Any adulteration must be strictly dealt with in terms of deterrent punishment under the law. Also, people should be made aware of the harmful effects of cheap cooking oils.'

The writer is ex-principal scientist, IARI, New Delhi.

The statesman, 6 April, 2009

Heart Attack: The Warning Signs

Dr. T.P. SINGH

The heart is the hardest working organ of human body; continuously pumping blood enriched with oxygen and vital nutrients through a network of arteries. It pumps about 5 litres of blood per minute and this gets multiplied 10 times during peak exercise. To perform this arduous task, the heart muscle itself requires a good supply of oxygen-rich blood which is provided by a network of coronary arteries—left anterior descending (LAD), left circumflex (LCA) arising from the left side and right coronary artery (RCA) from the right side.

If blood flow to the heart muscle is interrupted or blocked it suffers injury, called myocardial infarction and commonly known as heart attack.

Coronary artery disease is said to be present when plaque, an atherosclerotic chunk of fatty deposits, starts accumulating on the walls of coronary arteries, causing their hardening and narrowing. There is progressive narrowing of coronary arteries, thus starving heart muscle and rendering it ischaemic leading to chest pain called angina. Angina means

coronaries are unable to supply adequate amount of blood to the heart muscle as is required by it.

The plaque can also rupture anytime causing sudden occlusion of coronary artery by the formation of thrombus or blood clot. This sudden occlusion totally stops the blood supply to the heart muscle, leading to heart attack or myocardial infarction

ANGINAL SYNDROMES

Angina is the primary symptom of heart disease and heart attack. It is usually referred to as one of the two states: stable and unstable.

Stable angina is an extremely painful situation, a more predictable course and less serious than unstable angina. It is usually relieved by rest and responds well to medical treatment, especially with tablets kept below the tongue. Any event that increases oxygen demand can cause an angina attack. Some typical triggers include exercise, cold weather, emotional tension and heavy meals.

UNSTABLE ANGINA is usually described as part of a condition called acute coronary syndrome (ACS). It includes patients with the condition called NSTEMI (non-ST-segment elevation myocardial infarction), also referred to non-Q-wave heart attack. In this, ECG and blood tests suggest a developing

heart attack. These conditions are less severe than heart attack but may develop into full-blown heart attacks without aggressive treatment.

Angina attacks can occur at any time during the day, but a high proportion seems to take place in the early hours of the day. The unstable angina is often an intermediate stage between stable angina and a heart attack and its course is unpredictable, a sign of more serious disease. It is usually diagnosed if one or more of following conditions occur.

Pain awakens the patient or occurs at rest.

A patient who has never experienced angina but is now having severe or moderate pain during mild exertion within last two months.

Stable angina has progressed in severity, frequency and duration or medications are less effective in relieving pain.

INDICATORS OF HEART ATTACK

Anyone who believes that he or she is having heart attack should not hesitate to contact emergency medical services.

People having any unusual chest pain or unexplained shortness of breath not clearing up with routine medications should go to a cardiologist immediately.

The severity of pain and other symptoms before heart attack vary greatly among individuals and the onset may be abrupt, gradual or intermittent,

Chest pain is the most common indicator and clinical expression of heart disease. People with risk factors for heart disease or having heart disease should be very particular about any chest pain. It may be experienced as crushing weight against chest with profuse sweating, may radiate to the left shoulder, arm, neck or jaw. Some may have a sense of fullness, squeezing of pressure over the chest. People may also experience nausea, vomiting, cold sweats, indigestion, heart-burn, abdominal pain and fainting. Many patients may not have chest pain and may present with shortness of breath and cardiac arrest.

Some people with severe coronary artery disease may not experience angina—this condition is called silent ischaemia. It may be due to abnormal processing of heart pain by the brain. It is a dangerous condition because the patient has no warning signs of heart disease. It may occur mainly in diabetics.

Symptoms that is less likely to indicate a heart attack.

Sharp pain brought on by respiration/ coughing.

Pain mainly in lower or middle abdomen.
Pain is pin-pointed with tip of one finger.
Pain reproduced by moving or pressing on chest wall/arms.

Very brief pain lasting a few seconds.

RISK FACTORS

There are many risk factors which can accelerate the process of coronary artery disease. These are smoking, diabetes, high blood pressure, high cholesterol, obesity and family history of premature heart disease.

The minor risk factors can be high stress jobs, type-A personalities and sedentary lifestyles. The risks which can be fully aborted by us alone are smoking and sedentary lifestyle.

Actions that need to be taken on the onset of symptoms.

Chew a tablet of aspirin. Take nitroglycerin as spray or sublingual tablet and repeat after five minutes, maximum up to three doses. Immediately call or reach emergency services. Do not deceive yourself.

The writer is consultant Cardiologist, Prime Heart and Vascular Institute, Mohali.

The Tribune, 15 April, 2009

Cataract: Single Surgery, Double Benefit

Dr. Mahipal S. Sachdev

When doctors diagnosed Ritu Rampal's deteriorating vision as a result of the early onset of cataract, she had a tough time getting used to the idea. It took her two years to mentally prepare herself for the surgery. But today she wishes she had got the phacoemulsification surgery done as soon as she was diagnosed. Dependent on spectacles and contact lens since the age of 15, her post-surgery vision is better than ever before, thanks to customized mono-vision lens.

"The cataract proved to be a blessing in disguise. I had spent my entire adult life needing spectacles to see. But after the cataract surgery, I can see better than ever before." Says the 48-year-old Emirates NVD executive.

Ritu is among that part of the population that gets cataract early because of a variety of reasons. While age is the most common reason for cataract age alters the proteins of the eye-lens making them opaque—the other causes include congenital and developmental

anomalies, trauma, inflammation of the eye, metabolic disease like diabetes, hypothyroidism or even usage of certain drugs that may contain steroids.

On the operating chair, the doctor told her what he was going to do and asked her to relax. Her brother, who had accompanied her, was sitting outside where he could see her being operated upon on a live screen.

Phacoemulsification is done by making a tiny incision in the lens and breaking the calcified lens with a laser. The broken pieces are removed by aspiration and a foldable lens is inserted into the eye. In Ritu's case, lens had been customized to her power.

"The Procedure took about 10-15 minutes and by the time I was in the car, I could see." Ritu says. She got her second eye operated upon within a fortnight and today she sees better than ever before.

Common symptoms of cataract:

Cloudy or blurred vision.

Change in one's perception of colours.

Sensitivity to bright lamps or sunlight.

Poor night vision.

Difficulty in driving, especially at night.

Frequent changes in eyeglass prescription.

POINTS TO REMEMBER:

- * Surgery is the only treatment for cataract.
- * Surgery should not be delayed till the cataract is mature.
- * Any cataract which causes blurring of vision that interferes with one's daily activities should be operated.
- * Surgery can be done in any season with modern technology.
- * There are no diet restrictions and no need for bed rest.

Treatment:

What are the treatment options for cataract?

In the absence of any proven medical cure, surgery is the only treatment for cataract. The two common surgical options available for cataract surgery are:

Conventional cataract surgery or extra-capsular cataract extraction.

Requires incision of 10-12 mm.

The cloudy eye lens is removed in one piece.

A hard plastic lens is implanted.

Multiple stitches are required.

Final glass prescription could take even up to 10 weeks.

Micro incision cataract surgery (phacoemulsification)

Requires a very small incision of 2.2 mm.

Cataract extraction with phacoemulsification and foldable lens implant.

Walk-in, walk-out procedure.

No injection, no pad, no stitch surgery.

Minimum post-surgery precautions quicker healing and recovery.

*The writer is Chairman and Medical Director,
Centre for Sight, New Delhi.*

The Tribune, 6 May, 2009

Beating PCOS

ISHI KHOSLA

POLYCYSTIC OVARIAN syndrome (PCOS)—a leading cause of infertility—affects some 35 per cent of women in their reproductive years and more than 90 per cent of obese women. The incidence of PCOS is rising, perhaps due to changing lifestyles, particularly, altered diet and exercise patterns. Its primary cause remains unclear.

Young women who get diagnosed with PCOS commonly seek medical attention because of irregular menstrual periods, missed periods, obesity, infertility, acne, excessive hair growth and thinning of hair on the scalp. Symptoms begin to show up around puberty and start of menstruation. However, many do not develop symptoms until their mid 20s. Symptoms vary with different ethnic groups. In the last decade, it has been shown that PCOS is an insulin-resistant state. This means there is too much insulin which is likely to cause testosterone overproduction by the ovaries. High levels of testosterone lead to absence of egg release (anovulation), amenorrhea (missed periods) and infertility.

PCOS has also been linked to high cholesterol levels, high blood pressure and abdominal obesity. It increases the risk of type II diabetes, heart disease, endometriosis and cancer. Anaemia may be seen in women with abdominal obesity.

Weight loss is essential for women with PCOS. It has been shown that even a 10 to 15 per cent weight reduction resulted in spontaneous conception in about 75 per cent of obese infertile women with PCOS.

A healthy diet also helps. Low glycemic foods—wheat bran, barley, oats, grainy breads, whole seeds, lentils, kidney beans—are recommended as they are digested slowly and induce less insulin secretion. They are associated with increased HDL, weight loss and improvement in insulin sensitivity and PCOS. A high fibre diet consisting of low glycemic whole grains, pulses, vegetables and whole fruits is beneficial. Excessively sweet fruits and fruit juices must be avoided, as also starchy vegetables such as potatoes. Restrict portions of polished rice, pasta, noodles, breads, idli and dosas. Lean proteins from pulses, soybean, tofu, egg, chicken and fish and lean cuts of meat are desirable too, Good fats including omega-

fats (fish, flax seeds, walnuts) and mono unsaturated fats (mustard oil, olive oil, canola oil, groundnuts, almonds) are useful. Natural sources of fats from nuts and seeds are best way of obtaining good fats.

Avoid hydrogenated or partially hydrogenated fats found in margarine, shortening, fast foods and bakery products. Avoid commercially available fried foods which may contain harmful Trans fats.

Useful herbs include fenugreek seeds (methi), cinnamon (dalchini), bitter melon (karela) and black seed (nigella). Regular aerobic exercise helps improve insulin resistance in the long run. Alcohol must be restricted as excessive alcohol can worsen insulin resistance. Women who consume alcohol must restrict it to one small drink. Cigarette smoking should be strictly discouraged in all women with PCOS as it will increase the risk of heart disease and diabetes.

The Indian Express, 10 May, 2009)

Oral Cancer Catching Them Young

**India's Tobacco-Mouth Graph Shows That
Youngster Below 30 Years Form 20% Of the
Patient Pool, Say Doctors**

Malathy Iyer/TNN

Twenty-one-year-old Naveen, who is battling tongue cancer, has come to terms with the fact that he may lose his ability to speak clearly after doctors remove half his tongue in a bid to save his life. About 85% of oral cancer occurs due to abuse of tobacco (smoke and smokeless/chewing) or alcohol. But what is alarming the doctor about India's tobacco-mouth cancer graph is that now youngsters below 30 years of age form 20% of the patient pool.

“The youngest boy whose tongue was operated was 13 years old,” says Dr. Pankaj Chaturvedi, head and neck cancer surgeon at Tata Memorial Hospital. He remembers a 28-year-old woman who started using gutka as a pain killer during a toothache at 15 years of age. While people below 25 years of age being afflicted by the disease is rare, Dr. Chaturvedi is worried that as the youth get increasingly addicted to

the cheap tobacco-based products, the cancer numbers too will increase. Incidentally, in 1999, the Journal of Indian Medical Association reported an unusually high incidence of oral sub-mucous fibrosis—a stage that predates cancer by five years—among younger individuals.

The article's author, Dr. P.C. Gurpta, then with the epidemiology research unit of the Tata institute of Fundamental Research in Colaba, wrote that “there are several recent reports in the literature predicting an in mouth cancer incidence in India. This prediction is based upon observation of an increasing prevalence of oral sub-mucous fibrosis, especially in younger individuals, caused by gutka, an industrially manufactured food item”.

A walk through the wards and the outpatients department of Tata Memorial Hospital tells the story of an ignored epidemic. In the ICU lies 2-years-old Manish, an imitation jewelry worker from Santa Cruz, who cannot talk as his whole tongue has been removed.

“He has stage IV cancer. He has been chewing gutka for 12 years,” says a resident doctor after pursuing

his life. On the next bed, a smoker with tongue cancer is awaiting discharge.

In the Tata Memorial Hospital's OPD, every patient has a similar story to tell: years of consuming gutka, khaini, arecanut or smoking cigarettes or bidis. "Almost all the patients in the OPD have mouth cancer caused due to tobacco abuse," says the doctor.

It is not as if Naveen didn't know about gutka and its carcinogenic qualities. "I just didn't think it would affect me, or so soon," he adds.

"But my parents would rather have me alive than dead right now." He says.

(Names of patients have been changed to protect their identities).

Head And Neck Cancers

The encompasses a wide range of tumours that occur in the head and neck region, including the nasal passages, sinuses, mouth, throat, larynx, swallowing passages, salivary glands and the thyroid gland. People who use tobacco or drink alcohol excessively are much more likely than others to develop the disease.

ORAL CANCER arises in the mouth. It includes the lips, the gums and the area behind the wisdom teeth, the inside of the lips and cheeks, the floor and roof of the mouth and the front two thirds of the tongue.

LARYNGEAL CANCER begins in the larynx or the voice box. It sits at the top of the trachea, the tract that leads to the lungs.

NASAL CAVITY & PARANASAL SINUS CANCERS are found in the tissues that line these hollow structures. The paranasal sinuses are hollow areas in the bones of the face near the nose that produce mucus.

NASOPHARYNGEAL CANCER is found in the nasopharynx, the uppermost portion of the throat.

OROPHARYNGEAL CANCER is found in the section of the throat (oropharynx) located just beyond

the mouth. The region includes the base of the tongue, the soft palate (the soft area just beyond the roof of the mouth) and the area around the tonsils.

HYPOPHARYNGEAL CANCER is found in the hypo-pharynx, the uppermost portion of the esophagus (the tube through which food travels to the stomach).

SALIVARY GLAND CANCER is found in the salivary glands, the structures that produce saliva to keep the mouth from drying and aid in digestion of food.

TREATMENT It may include surgery, radiation therapy, or chemotherapy. When surgery is extensive, reconstruction of the area is often possible. For example, in cases where the jaw bone is removed, a surgeon can fashion a new jaw using bone from the patient's own leg. Dental implants can be used to replace teeth.

Death Clock

According to Smoke free Mumbai Campaign, an endeavor of the BMC along with NGOs. Since Thursday, January 01, 2009.

15,668 Mumbaikars have died due to smoking related causes.

Rising Numbers

* The excess number of deaths among adult smokers in 2010 will be about 9,30,000.

* That includes 580,000 deaths among men and 90,000 deaths among women between the ages of 30 and 69 years,
–Projection based on Study in India and Canada.

Bidi Menace

6,00,00 lives are lost in India every year due to the bidi habit says the Bidi Monograph entitled, Bidi Smoking and Public health, released by the government of India in May 2008.

SYMPTOMS

- * A sore in the mouth that won't heal or bleeds easily.
- * Frequent nosebleeds, ongoing nasal congestion, or chronic sinus infections that don't respond to treatment.
- * Persistent sore throat, hoarseness or a change in the voice.
- * Pain in the neck, throat or ears that won't go away.
- * Blood in the sputum.
- * Difficulty in chewing, swallowing or moving jaws or tongue.
- * Loosening of teeth.

The Times of India, December, 30, 2009

Gutka Got Your Tongue? Docs Lop It Off To Save Lives

Malathy Iyer/TNN

Mumbai: Naveen speaks slowly as though savouring every syllable. “I have always wanted to enlist as jawan in the army,” says the Bihari youth, who used to travel 200 km. one way to Bhagalpur every time he had to consult a doctor about that odd sensation in his mouth.

A big question mark however, clouds the 2-year-old’s aspirations. Within the next few days, he won’t be able to speak as easily, his speech will, at best, be garbled effort at communication. The reason? City oncologists will remove half of his tongue in a bid to save his life.

Naveen—a gutka junkie since 14 years of age who could sleep only after taking the concoction as a nightcap and face a new day only after using another pouch as a mouthwash—suffers from tongue cancer. By the time he reached Tata Memorial Hospital, India’s best known address for cancer treatment, after six months of battling Hepatitis B and accidentally discovering a numb part in his tongue, surgery was the only way to help Naveen.

Not surprisingly then, the youngster measures every word he speaks. “My speech will be quite affected by the surgery,” he says, already resorting to drawing to communicate how a huge portion of his tongue has been eroded by cancer.

While 21 is a young age to lose a part of the tongue, oncologists say that Naveen’s story though rare is not unheard of. Says head and neck cancer surgeon Dr. Pankaj Chaturvedi of Tata Memorial Hospital; “Oral cancer roughly affects 20 per lakh Indians. In some cities, the incidence goes up to 60 per lakh.”

A Nation’s Problems

The age for initiation for gutka consumption has been reported between 8 and 14 years in India.

A survey done by the Indian Dental Association found that 10%-40% of school students and 70% of students in colleges in Mumbai chew gutka and paan masala.

A survey of school children in a coastal village of Kerala showed a 29% prevalence of tobacco chewing.

Another survey in Mizoram showed the incidence at 56.5%.

Oral cavity cancer is considered the most

preventable form of the disease. About 85% of the cases occur due to abuse of tobacco (smoke and smokeless/ chewing) or alcohol. But what is alarming the doctors about India's tobacco-mouth cancer graph is that now youngsters below 30 years of age form 22% of the patient pool. "The youngest boy whose tongue was operated was 13 years old," he says. He remembers a 28-year-old woman who started using gutka as a pain killer during a toothache at 13 years of age.

While people below 25 years of age being afflicted by the disease is rare. Dr. Chaturvedi is worried that as the youth get increasingly addicted to the cheap tobacco-based products, the cancer numbers too will increase.

Incidentally, in 1999, the Journal of Indian Medical Association reported an unusually high incidence of oral sub-mucous fibrosis—a stage that predates cancer by five years—among younger individuals.

(The Indian Express, 30 December, 2009)

51 pc School Kids In Metros At High Risk of Lead Poisoning

Study traces it to lead-based paints, asks government to frame law

ADITI TANDON

Sudden decline in IQ levels of children and unexplained retardation or hyperactivity among them can now be traced to unacceptably high levels of lead in their blood-sugar levels.

In a significant study that could form basis of India's first legislation on lead-free paints, experts from the Quality Council of India (QCI) have found that over 51.3 per cent children below 12 years in Indian metros have their blood-lead levels above the permissible limit of 10 microgram per deciliter (ug/dl)—a concentration dangerous enough to reduce IQs by four to six units and cause serious developmental disorders.

The health hazard has been traced to high lead levels in domestic paints, used on walls in schools and residences, school buses, swings in playgrounds and toys, "Over 93 per cent paints manufactured in India contain added lead, which is severely damaging our children's health. If we could ban this, we would

ensure that every child has about six units of higher IQ. Tragically, symptoms of lead hazard do not reveal themselves easily. A parent, whose child suddenly loses IQ, will hardly know that the paint on the child's school bus is causing the damage." secretary general of the QCI. An autonomous body under the Ministry of Commerce and Industry, Giridhar Gyani said.

The QCI, with a mandate to improve quality competitiveness of Indian products, has now asked the Commerce Ministry to bring a lead-free legislation, direction industry against using added lead in paints. China and Taiwan are about to formulate lead-free paints laws.

In fact, China, India and Malaysia are worse of on the front. "An analysis shows that over 80 new domestic paints from these countries had very high lead levels exceeding levels of 1,000 parts per million (ppm)," principal adviser to the QCI and executive director of the National Referral Centre for Lead Poisoning in India (NRCLP), Bangalore, Venkatesh Thuppil said yesterday. He lead the QCI study.

By contrast, in the US, lead in paint at 90 ppm is effective since August last and the prior limit of 600 ppm is not in use. This limit in developing nations remains dangerously high, warranting immediate

government intervention, given another QCI projection that reduction of IQ by four to six units could cause the economic damage of over Rs. 600 crore annually by 2015.

But till the law comes, QCI has asked the National Bal Bhavan to help it create awareness against lead-based paints among school authorities and parents. "They must choose lead-free paints," Gyani said. The warning is important considering the booming housing sector, expected to offer 30 million new homes and leading to increased use of lead-based paints.

Already, four firms in India, including Asian Paints, ICI India and government's Mysore Lead are producing lead-free paints, in part; these are 25 per cent costlier than others. The "Project Lead Free" study of the QCI was conducted over five years on a sample of 23,500 children in Delhi, Kolkata, Mumbai, Hyderabad, Bangalore and Chennai. It found average lead concentration for new enamel paints in India to be the highest—85,000 ppm in yellow paints (most dangerous to health). White paints with a much lower concentration of 1330 ppm were found better.

The Tribune, 16 February, 2010

Poison in Paints

Discourage the use of lead

THAT lead-based paints can be harmful has been known for some time. Now a study by the Quality Council of India has made a startling revelation that over 51.3 per cent of children below 12 years have blood lead levels above the permissible limit, tracing it to lead-based paints. While the study is confined to the metros, the results are not likely to be any different in other big cities of India witnessing a construction boom, thus exposing more and more people to the risk of lead poisoning.

Lead is toxic and affects many organs of the body. In children it can cause irreversible brain damage and retard mental development. A sudden decline in their IQs can also be attributed to high levels of lead in blood sugar. While there can be many reasons for lead poisoning, including petrol and lead lined pipes, the major cause is the use of lead based paints. In India, most paints have added lead. The New Delhi-based Centre for Science and Environment found that 72 per cent of the sample tested had a lead content higher than the limit specified by Bureau of Indian Standards (BIS).

While developed nations have brought down the lead levels in paints to permissible limits, in India the paint companies do not care to inform the consumers about the potential health hazards of lead-based paints and the awareness in this regard, too, is almost negligible. To make matters worse, laws are silent and even the BIS limit is no more than a recommendation.

While laws to regulated lead levels in paints need to be framed, the consumers have to be made aware of the dangers of lead-based paints. Since many experts argue that there is no acceptable limit or safe threshold to lead exposure among children, lead-free paints are perhaps the only answer to safeguard the health of both children and adults. The government must offer incentives to the companies selling lead-free paints and consumers must reject lead-based paints. The colour on the walls cannot be allowed to become a health hazard, especially for small children, who stand at a greater risk of lead poisoning, which can be fatal too.

(The Tribune, 19 February, 2010)

Germ at Your Work Place

MANPRIYA KHURANA

Whoever thought being careful about health just revolved around ergonomics of the office chair. There are creatures lurking at your work place that are directly proportional to one's health, are invisible, don't bite and never ever pain or pinch you. Don't underestimate, for they are capable enough to confine you to bed for weeks at a stretch. We are talking about germs, technically including bacteria, viruses, fungi and even parasites and no more, are they prevalent just among mud and muck. Your keyboard, cell phone, computer mouse, wallets (in short, office) have more bacteria than your bathroom.

Among several studies conducted on the subject, University of Arizona's says, a typical desk is capable of supporting up to 10 million bacteria, which is, 400 times more germs than the average toilet seat. That's not the end of the dirty truth. Common elevators, restroom handles, phones, water fountain knobs, printer buttons and elevator switches, the places and possibilities are endless.

As Dr. Bela Sharma, Internal medicine, Fortis, says, "Places like keyboards and cell phones are very frequently used and generally not hygienically cleaned. And at times, if a person has cold or flu

then the particle settle down." The habits of modern work place with increased office hours and frequent snacking further create a haven for bacterial growth. So does the moisture and warmth in these gadgets. As Dr. Bela exemplifies, "If you use earphones for more than 1 hour, chances of bacterial growth go up by 700 times!"

The result can be anything from common flu to in vertigo to at times, absolutely nothing. They might not be life threatening but certainly result in more colds and flu.

The key lies in good old school habits and little bit of hygiene management. Says Dr. Paramjit Singh Walia, city-based skin specialist, "One should clean hands before eating anything and wash them immediately on getting back home." Agrees Dr. Bela, "Hand washing should be done diligently and made a habit. And ideally, if possible, person should avoid office while suffering from flu or cold." While sanitizers are yet another option. Dr. Kamna Nagpal, city based gynecologist, says, "One must get hold of antibacterial hand sanitizer, to ensure your hands are clean throughout the day."

Kindly mind the difference between precaution and panic. As Dr. Paramjit puts it, "There's a chance of transmission of infection only when someone infected

has touched these places. There's need to be careful but not phobic." In the words of Dr. Bela, "Skin generally provides good immunity and doesn't let infection pass off easily. Unless a person infected comes in contact with these objects, chances of transmission of any kind of disease are negligible." Health after all, is a holistic concept.

Here's what you can do:

- * Add disinfectant spray to your everyday paraphernalia. This is to kill any airborne germs that might be lurking in your workspace.
- * Then, use disinfecting wipes to get rid of all the grease and grime on your desk, keyboard, computer mouse and phone. Wipe these things daily, if possible.
- * Try washing your hands more frequently than you do. Especially, after You've finished using any shared office equipment like printer, scanners and Xerox machines.
- * As an eye-opener, turn your keyboard upside down and tap it hard with your hand all over, for two minutes and notice.
- * Last but not least, build your immunity by stocking on through natural source of vitamins every morning.

(The Tribune, 10 December, 2008)

Not Just What the Doctor Ordered

The idea of patient's rights is taking root in India, but it must be carefully nurtured

P.C SHARMA

THE idea of human rights has been central to the last century, chief among these being the right to life with dignity. Entitlement to health care is crucial, as the universal declaration of human rights has affirmed, "Everyone has the right to a standard of living adequate for the health of himself and of his family, including food, clothing, housing and medical care and necessary social service."

The right to health and patients' rights is not just about access and the building of hospitals. It includes a wide range of factors like freedom from non-consensual treatment, safe food, safe drinking water, adequate sanitation, health education, non-discrimination, gender equality etc.

The Supreme Court of India, in *Parmanad Kataria vs. Union of India* has aptly observed that the preservation of human life is of paramount importance. Article 21 of the Constitution casts that obligation on the state. A doctor at the government hospital,

positioned to meet the state's obligation, is, therefore, duty bound to extend medical assistance towards the preservation of life. This obligation being total, absolute and paramount, laws of procedure whether in statues or otherwise, which would interfere with this obligation must give way.

International covenants, like the Alma Ata Conference, have put the people at the centre of health care, fostering a culture of patient's rights. The conventional approach, where the patient completely and uncritically surrendered to the doctor's authority, is expected to give way to a more intimate patient-doctor relationship. Patients are entitled to know what they are being subjected to by the doctors and nurses. The patient's entitlement is gradually expanding to include right to choose treatment, right to informed consent, freedom from exploitative practices, right to privacy and confidentiality, respect and dignity, knowledge of hospital rules and regulations, free consent, right to make complaints etc. All medical practices that deny or limit equal access to health care for all persons, whether gender or caste-based, have to give way to a non-discriminatory approach.

Being a welfare state, India has introduced

free medical services for its citizens and formulated enlightened health policy, but it has not enacted any legislation on the rights of the patients. Perhaps an enactment akin to US Patient's Bill of Rights is necessary to operationalize the patient's rights. Basic features of this legislation are information disclosure, choice of providers and plans, access to emergency service, participation in treatment decisions, respect and non-discrimination, confidentiality of health information, complaints and appeals and consumer responsibilities.

In India, patients' rights got a fillip after the Consumer Protection Act (CPA) was passed in 1986. It gained strength following the Supreme Court judgment (*Indian Medical Association vs. V.P. Shantha*, 1995 6 SCC 651) whereby the medical profession came under the CPA. Prior to the CPA, the government enacted the Medical Council Act in 1956. The Medical Council code of ethics and the norms of Nursing Council define the duties of doctors and nurses towards patients.

But patients claim to attainable standards of health appear to be threatened by illegal and unethical practices in the medical profession, the manufacture and distribution of fake or sub-standard drugs-especially

with poor or rural people who may not know what is being administered to them. There are also poignant cases of bodily impairment and serious disability, even mortality resulting from professional negligence. No one is better qualified than medical professionals themselves to maintain a vigil over such hazards.

Acutely conscious of the illegal practices that have crept into the medical profession, like fake registration certificates, sub-standard treatment, quackery etc., the National Human Rights Commission has issued a wide range of recommendations covering HIV/AIDS, access to medical services, increasing awareness about certain dreaded diseases, regulation of public health services, dissemination of information, decentralization of authority through Panchayati raj institutions, etc. NHRC adopted the unique practice of holding public hearings across the country on the right to health care. These workshops provided a forum for patients to express grievances about the denial of health care and assert their rights.

While discussing patient's rights, one cannot be oblivious of the fact that the current rights-based approach has led to some conflict situations. While asserting their rights, patients ignore their

responsibilities and tend to lay disproportionately greater stress on the obligations of the medical professionals and even go to the extent of launching legal action against them. While patient's rights are sacrosanct, instances of misplaced assertive actions tend to mar the new, developing relationship between patients and doctors. All stakeholders must make sure that this relationship between medical professionals and the recipients of healthcare is not allowed to become adversarial. Justice Katju of the Supreme Court of India has also observed (2009) 3 SCC Cases 1, p25 para 65) that the doctors, medical institutions and nursing homes need not be unduly worried about the performance of their functions. The law is a watchdog, not a bloodhound and as long as doctors do their duty with reasonable care they will not be held liable even if the treatment is unsuccessful.

The vigil maintained by the judiciary and institutions like NHRC can strike a healthy balance between the responsibilities and rights of the patients on one hand and obligations on the other, fostering an emerging culture of patients' rights.

The Writer is member, National Human Rights Commission.

The Indian Express, 26 March, 2010

When Your Liver Gets Fat

Not all liver problems are because of alcohol. With obesity and diabetes on the rise, more cases of fatty liver are being reported. Here's what you need to know to stay safe.

Dr. Anand Khakhar

The liver performs hundreds of vital functions. Without it, one cannot digest food and absorb nutrients, get rid of toxic substances from the body or even stay alive. Serious complications can arise if one develops liver problems. For those who think that liver disease is solely alcohol-related; think again. Liver diseases affect more than one out of every 10 Indians. There are over 90 different forms of liver disease ranging from infectious to hereditary diseases that affect all age groups.

Of late there has been an alarming rise in the diagnosis of fatty liver largely due to the rising incidence of diabetes, central obesity and elevated cholesterol (particularly triglycerides).

What is fatty liver?

Fatty liver is, as its name suggests, the buildup of excess fat in the liver cells. Normally your liver

contains some fat, but if fat accounts for more than 10 per cent of your liver's weight, then you have fatty liver and you may develop more serious complications.

Fatty liver may cause no harm, but sometimes the excess fat leads to inflammation. This condition, called steatohepatitis, causes liver damage. Sometimes inflammation from a fatty liver is linked to alcohol abuse; this is known as alcoholic steatohepatitis. Otherwise the condition is called non-alcoholic steatohepatitis, or NASH. An inflamed liver may become scarred and hardened over time. This condition, called cirrhosis, is serious and often leads to liver failure requiring liver transplant. NASH is one of the top three leading causes of cirrhosis world-wide.

What are the symptoms?

A fatty liver produces no symptoms on its own. It shows up during preventive health checks or medical tests for other conditions. NASH can damage your liver silently for years or even decades. If the disease gets worse, you may experience fatigue, weight loss, abdominal discomfort, weakness and confusion.

What causes the problem?

Eating excess calories causes fat to build up in

the liver. Obesity, diabetes, high triglycerides, alcohol abuse, rapid weight loss and malnutrition may also cause fatty liver. However, some people develop fatty liver even if they have none of these conditions.

How is it diagnosed?

Your doctor may see something unusual in your blood test or notice that your liver is slightly enlarged during a routine check-up. The make sure you don't have another liver disease, your doctor may ask for more blood tests, an ultrasound. Sometime a CT scan may be needed. If other diseases are ruled out, you may be diagnosed with NASH. Although rarely needed, a liver biopsy is the only way to diagnose NASH for sure.

Are there any new treatments?

Fatty liver is currently the focus of intense research to provide us with better tools for treatment in the future. Scientists are studying whether various medications can help reduce the inflammation on the liver, including new diabetes medications that may help even those who are not diabetic.

What is the best way to prevent this problem?

The best way to reduce risk of developing

fatty liver is to maintain a healthy weight and normal triglyceride levels. Avoid excess alcohol and other substances that could harm the liver.

What other things help the liver healthy?

The liver is a resilient organ. It can remain functional after losing most of its cells to disease. It can regenerate in a few weeks even after much of it has been removed during surgery. But it isn't indestructible; prolonged alcohol consumption, viral hepatitis, non-alcoholic fatty liver disease and certain hereditary and auto-immune diseases can lead to serious liver problems.

To keep healthy and avoid any potential problems, here's a checklist:

- * Don't mix other drugs with alcohol, Acetaminophen (paracetamol and others) can be toxic to the liver even if you drink in moderation.

- * Get vaccinated. If you're at increased risk of contracting hepatitis or if you've already been infected with any form of the hepatitis virus, talk to your doctor about getting the hepatitis B vaccine. A vaccine is also available for hepatitis A.

- * Use medications wisely. Use prescription and

non-prescription drugs only when you need them and take only recommended doses. Talk to your doctor before taking herbal supplements along with other medication.

* Beware of certain supplements. Herbal supplements that can be toxic to the liver include African kava, comfrey, chaparral, kombucha tea, pennyroyal and skullcap. Also avoid high doses of vitamin A, D, E and K.

* Avoid contact with other people's blood and body fluids. Hepatitis viruses can be spread by accidental needle sticks, improper cleanup of blood or body fluids and sharing intravenous needles. It's also possible to become infected by sharing razor blades or toothbrushes or by having unsafe sex.

* Be careful with aerosol sprays. When you use an aerosol cleaner, make sure the room is ventilated, or wear a mask. Take similar protective measures when spraying insecticides, fungicides, paint and other toxic chemicals.

* Don't eat too many fatty foods. The liver makes all the cholesterol the body needs. Eating a well-balanced, nourishing diet and a regular exercise

programme will help your liver do its job properly.

* Watch your weight. Obesity can cause 'non-alcoholic fatty liver disease', which may include fatty liver, hepatitis and cirrhosis.

* Drink alcohol in moderation, if at all. There is no absolutely safe way to drink alcohol. But more than one drink a day for women and more than two drinks a day for men over a few years may be enough to lead to cirrhosis. Use of certain drugs, including some illegal drugs, also can cause liver disease. Take 'alcohol free breaks', say three months in a year.

* Don't use recreational drugs. They're often addictive and can cause a multitude of health problems, including liver failure.

* Plan for pregnancy. Several rare disorders of pregnancy can cause acute liver failure, so see your doctor for prenatal care. If you live in an area where hepatitis E is endemic, make sure that you have access to safe drinking water. If you contract hepatitis E while pregnant, you're at risk of developing acute liver failure.

What you can do

* If you have fatty liver, particularly NASH, you should:

- * Lose weight safely! That usually means losing no more than one or two pounds a week.
- * Lower your triglycerides through diet, medication or both.
- * Avoid alcohol.
- * Control diabetes.
- * Eat a balanced, healthy diet.
- * Increase your physical activity.
- * Get regular checkups from a liver specialist.

Warning Signs

See your doctor if you notice a combination of the following symptoms:

- * Discoloured skin and eyes that appear yellowish.
- * Abdominal pain and swelling.
- * Itchy skin that doesn't seem to go away.
- * Dark urine colour.
- * Pale stool colour.
- * Bloody or tar-coloured stool
- * Chronic fatigue.
- * Nausea.
- * Loss of appetite.

Risk Factors

The Most common ones are:

- * Obesity: People with a body mass index of 25-30 or above 30.
- * Diabetes: Those who have trouble maintaining their blood sugar levels.
- * High Cholesterol: especially those with elevated triglyceride levels.
- * Abdominal surgery: Operations to remove large sections of the small intestine treat obesity (stomach or small intestinal bypass) often lead to rapid weight loss. This may increase risk of fatty liver disease.
- * Medications: Particularly oral steroids e.g. Prednisone, synthetic estrogens for menopause, certain medications e.g. amiodarone (for irregular heart beat), tamoxifen (for breast cancer and methotrexate (for rheumatoid arthritis).
- * Other conditions; Like Wilson's disease, Glycogen storage diseases, Abetalipoproteinemia, Galactosemia.

*The author is a Senior Consultant
Liver Transplant and Hepatobiliary
Surgeon based in Chennai.
The Hindu, 25 April, 2010.*

X-ray Exposure

Getting X-ray scans often could put
you at a health risk

ISHITA YADAV

WHEN 35-year-old Shivani Malik broke her leg a few months ago, she would go in for an X-ray every two weeks to check if it was healing. “My leg was in a cast and I felt I needed to know how much it had healed,” she says. After six weeks and three X-rays, Malik realized that her skin had started peeling off from the ankle and she was losing hair. It’s then that her doctor told her to stop getting X-ray scans.

X-rays are electromagnetic radiations in a wave form just like gamma, ultraviolet, infrared and radio waves—but with a different wavelength. “X-rays, for instance, can pass through wood and the human body just like light can pass through glass,” says Dr. Sneh Bhargava, radiologist, Sitaram Bhartia Research Institute, New Delhi.

While there’s no way X-rays can be avoided completely, getting them done regularly can be extremely harmful. “In the human body, there are three systems which are affected by X-rays. First is

the genitalia, which, if affected, may have a negative effect on children. X-rays are also very bad for the skin. It can result in skin rashes, hair loss and in some cases, skin cancer. The third system that is affected is the blood, both red and white corpuscles,” says Dr. Bhargawa.

If the red blood cells are affected, one can suffer from anaemia. Damage to white blood cells can weaken your immune system and make your body more vulnerable to various diseases.

Doctors say that an X-ray should not be repeated before three months. “A patient should only be exposed to an X-ray when more information is needed than what a normal physical exam can give,” says Dr. Mahesh S. Malangi, radiologist, Apollo Hospitals, Bangalore. In some cases, however, you will have to make an exception. For instance, if you suffer from bronchitis or other lung diseases, your doctor might need you to go in for regular lung X-rays. If you have broken a bone, though, it’s not required to go in for an X-ray regularly. “We only suggest regular X-rays to people when we want to check how their body is reacting to medication. There are some paranoid

patients who insist on getting an X-ray every week just to see how much their broken arm or leg has healed. That is unnecessary and by doing so, they only end up harming their body,” says Dr. Malangi.

X-rays should be avoided completely during pregnancy as it can be very harmful for the foetus. “Everything you need to know about the baby can be found out through an ultrasound. If the mother needs to go in for an X-ray herself, the abdomen should be covered by a sheet made of lead,” says Dr. Bhargava. They are also more harmful to children than they are to adults. “Radiations such as ultrasound and magnetic resonance imaging (MRI) are safer and should be used in children.” Says Dr. Malangi.

The Indian Express, 29 March, 2009

PINGALWARA DIARY

(UPTO JULY 2016)

Services rendered by Pingalwara Institution for the service of the suffering humanity are:-

1. Homes for the Homeless

There are 1752 patients in different branches of Pingalwara now a days:—

(a) Head Office, Mata Mehtab Kaur Ward, Bhai Piara Singh Ward	365 Patients
(e) Manawala Complex	860 Patients
(b) Pandori Warraich Branch, Amritsar	83 Patients
(c) Jalandhar Branch	39 Patients
(d) Sangrur Branch	226 Patients
(f) Chandigarh (Palsora) Branch	94 Patients
(g) Goindwal Branch	85 Patients
	<hr/>
	Total 1752 Patients

2. Treatment facilities

(a) **Dispensary & Laboratory:-** Pingalwara has a dispensary and a laboratory for the treatment of patients. It has an annual expenditure of about Rs.90 lakhs. Medicines are also distributed free of cost to the poor and needy people.

(b) **Medical Care Staff:-** Experienced medical staff like Nurses, Pharmacists and Laboratory

Technicians are available for the care of the Pingalwara residents.

- (c) **Blood-Donation Camps:-** A Blood Donation Camp is organized on Bhagat Ji's Death Anniversary every year. The blood is used for Pingalwara residents and road accident victims.
- (d) **Ambulances:-** Ambulances with basic Medical aid are available for victims of road accidents on G.T. Road, round the clock and provide facilities for taking Pingalwara patients to the hospital.
- (e) **Artificial Limb Centre:-** There is an Artificial Limb Centre at Manawala Complex, dedicated to the memory of Bhagat Ji which provides free of cost Artificial Limbs to Polio-affected and amputee cases. 7654 needy people have benefitted till April 2016.
- (f) **Physiotherapy Centre:-** A Physiotherapy Centre equipped with State-of-the-art equipment is functioning in the Manawala Complex since June 2005. On an average 80 patients are treated everyday.
- (g) **Operation Theatres:-** There is a well equipped Operation Theatre in Bhai Piara Singh Ward Amritsar for general surgery and A Micro Surgery

Operation Theatre in Manawala Complex where Cochlear Implants and major operations are carried out.

- (h) **Dental, Eye, Ear & Ultrasound Centres:-** These Centres have been set up to provide these services to Pingalwara residents, sewadars and their families.

3. Education

Pingalwara Society is running five Educational Institutions for the poor and needy children.

- (a) **Bhagat Puran Singh Adarsh School, Manawala Complex:-** This school provides free education to 750 students from the poor and deprived sections of the society. They are provided with free books and uniforms. Children being brought up by Pingalwara Society are also studying in this school.
- (b) **Bhagat Puran Singh Adarsh School, Buttar Kalan (Qadian):-** This school is dedicated to the sweet memory of Bhagatji. 446 students are getting free education under the able guidance of well qualified teachers. The school also provides financial help to students who have finished their school studies and are aspiring for higher studies.

- (c) **Bhagat Puran Singh School for Special Education, Manawala Complex:-** This school is providing Special Education to 185 Special children.
- (d) **Bhagat Puran Singh School for the Deaf:-** Bhagat Puran Singh School for Deaf Children is functional at the Manawala Complex since May 2005. The school is equipped with state-of-the-art training aid and has 150 children on its rolls.
- (e) **Bhagat Puran Singh School for Special Education, Chandigarh(Palsora):-** his school caters to the needs of Special adults of the branch.
- (f) **Vocational Centre:-** This Centre is providing free training in embroidery, stitching, craft work, making washing powder, candle making, ainting, etc. Young girls from the villages of surroundings areas are the main beneficiaries.
- (g) **Computer Training:-** Computers are available in all the schools for academic and vocational training.
- (h) **Hostel facilities:-** There are separate hostels for boys and girls in Manawala Complex. Many girls are pursuing higher studies in different colleges.

4. Rehabilitation

- (a) **Marriages:-** After being educated, boys and girls at Pingalwara are married to suitable partners. 37

girls and 4 boys have been married off till date.

5. Environment Related Activities

- (a) **Tree Plantation:-** Bhagat Puran Singh Ji was deeply concerned about the degradation of the environment. A vigorous campaign of tree plantation is started every year on Bhagat Ji's Death Anniversary. Each year 15,000 to 22,000 trees are planted in various schools, colleges, hospitals, cremation grounds and other public places. These include Amaltas, Kachnar, Behra, Champa, Arjun, Sukhchain, Chandni, Zetropa, Kari-patta were distributed to different institutions.
- (b) **Nursery:-** Pingalwara has its own Nursery where saplings of various plants and trees are prepared. Every year, the aim of nursery is to grow more than 54 different kinds of saplings every year.

6. Social Improvement Related Activities

- (a) **Awareness:-** Pingalwara has played an important role in spreading awareness about the evils in the society. This has been done by printing literature on religious, social and environmental issues at the uran Printing Press Amritsar and is being distributed free of cost. It has an annual expenditure

provide fresh milk to the Pingalwara residents.

10. Old Age Homes

Old age homes at Sangrur and Manawala Complex of Pingalwara caters to the needs of elderly people.

11. Projects Completed and Under Construction

Since 1997 ambitious projects of Sangrur, Palsora at Chandigarh and Manawala Complex have been completed. In the year 2009 new buildings—Administrative Block, Puran Printing Press, Deaf School, T.B. Ward at Manawala Complex and at Head Office and a New Administrative Block have also been completed.

In the year 2013, a new modern Bhagat Puran Singh School for Special Education in Manawala Complex of Pingalwara and a new Block for Pingalwara patients in Pandori Warraich Branch is under construction and is fast coming up.

Wahe Guru Ji Ka Khalsa

Wahe Guru Ji Ki Fateh

Dr. Inderjit Kaur,

President,

All India Pingalwara Charitable Society (Regd.),

Tehsilpura, G.T. Road, Amritsar. (Punjab).

DETAILS OF BANKS FOR SENDING DONATION THROUGH ONLINE/CHEQUE/DRAFT				
Cheques & Bank Drafts may be sent in favour of :				
All India Pingalwara Charitable Society (Regd.) Amritsar.				
PAN CARD NO. AAATA2237R				
S. No.	Name of Account	A/C No.	Name of the Bank	Swift Code For Foreign Inward Remittance
FOR FOREIGN DONORS				
1.	All India Pingalwara Charitable Society (Regd.) Amritsar.	01562010002890	Oriental Bank of Commerce Sharifpura Amritsar.	ORBCINBBASR
FOR INLAND DONORS				
2.	All India Pingalwara Charitable Society (Regd.) Amritsar.	01562010003720	Oriental Bank of Commerce Sharifpura Amritsar.	ORBC0100156
3.	All India Pingalwara Charitable Society (Regd.) Amritsar.	10978255668	State Bank of India Town Hall, Amritsar	SBIN0000609
4.	All India Pingalwara Charitable Society (Regd.) Amritsar.	630510100026147	Bank of India City Centre Amritsar	BKIDINBBASR

5.	All India Pingalwara Charitable Society (Regd.) Amritsar.	685010100009799	Axis Bank Ltd. City Centre, Amritsar	UTIB0000685	AXISINBB179
6.	All India Pingalwara Charitable Society (Regd.) Amritsar.	0018002100097336	Punjab National Bank Hall Bazar, Amritsar.	PUNB0001800	PUNBINBBAHB
7.	All India Pingalwara Charitable Society (Regd.) Amritsar.	006601012522	ICICI Bank Ltd. Lawrence Road, Amritsar	ICIC0000066	ICICINBBFEX
8.	All India Pingalwara Charitable Society (Regd.) Amritsar.	01151000246510	HDFC Bank Ltd. Mall Road, Amritsar	HDFC0000115	HDFCINBB
9.	All India Pingalwara Charitable Society (Regd.) Amritsar.	13131000082013	HDFC Bank Ltd. Ghanta Ghar Golden Temple Amritsar	HDFC0001313	HDFCINBB
10.	All India Pingalwara Charitable Society (Regd.) Amritsar.	00011000096048	Punjab & Sind Bank Hall Bazar, Amritsar	PSIB000A001	PSIBINBB017
11.	All India Pingalwara Charitable Society (Regd.) Amritsar.	01010100015572	Bank of Baroda Town Hall, Amritsar	BARBOAMRITS	BARBINBBAMR

- * Preserve natural resources.
- * Service of the poor and destitutes is the service of God.
- * Plant trees to save environment.
- * Wear Khadi clothes to lessen unemployment.
- * Simple living and high thinking is a bliss.
- * Use less of diesel and petrol.
- * Exercise restraint in your living habits.
- * Don't forget to plant trees. They are the sign of prosperity of a nation.

—Bhagat Puran Singh

K.M. Munshi writes that Matsya Purana says: "One who sinks a well lives in heaven for as many years as there are drops of water in it. But to dig ten such wells equals in merit the digging of one pond; digging of ten such ponds was equal to making a lake; making of ten lakes was as meritorious as begetting a virtuous son but begetting ten such virtuous son had the same sanctity as that of planting a single tree."