

**Health Updates - IX**  
**– News/New Researches**  
**- Compiled**

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# 129\_Brisk Walking as Good as Running for Heart: Study

Friday, Apr 5, 2013, Agency: IANS

Walking with moderate speed using the same energy as intensive running can be beneficial in reducing high blood pressure, high cholesterol and diabetes risks, says a study.

The findings, reported in the American Heart Association journal Arteriosclerosis, Thrombosis and Vascular Biology, was based on analysis of 33,060 runners in the National Runners' Health Study and 15,045 walkers in the National Walkers' Health Study.

The researchers found that the same energy used for moderate intensity walking and vigorous intensity running resulted in similar reductions in high blood pressure, high cholesterol, diabetes, and coronary heart disease over six years of the study, reports Science Daily.

"Walking and running provide an ideal test of the health benefits of moderate-intensity walking and vigorous-intensity running because they involve the same muscle groups and the same activities performed at different intensities," said lead author Paul T. Williams.

"The more the runners ran and the walkers walked, the better off they were in health benefits. If the amount of energy expended was the same between the two groups, then the health benefits were comparable," added Williams, staff scientist at Lawrence Berkeley National Laboratory, Life Science Division in Berkeley, California.

<http://www.dnaindia.com/health/1819208/report-brisk-walking-as-good-as-running-for-heart-study>

## 130\_Experts Triple Estimate of World Dengue Fever Infections

LONDON, Apr 7, 2013

**Reuters) - Around 390 million people are infected each year with dengue fever - the world's fastest-spreading tropical disease - more than triple the current estimate by the World Health Organization, experts said on Sunday.**

The new finding, based on several years of analysis, underscores the growing burden of the mosquito-borne viral disease, which is also called "breakbone fever" because of the severe pain it can cause.

There is as yet no approved vaccine or specific drug to treat dengue, which is not normally fatal but lands many victims in hospital.

Researchers from the University of Oxford and the Wellcome Trust presented their results, along with a detailed map of dengue distribution, in the journal Nature.

Their new figure includes 96 million severe cases and approximately 300 million mild or asymptomatic episodes. That compares with the WHO's most recent estimate for overall infections of 50-100 million a year,

The high number of relatively mild cases offers little cause for comfort, since it suggests the reservoir of disease is far larger than expected.

What is more, dengue is a disease that hits more than once and people who get it mildly first time are more likely to have a serious episode if bitten again by an infected mosquito.

"The asymptomatic patients, in terms of the future burden of disease, are a very important contributor," said Jeremy Farrar, director of Oxford University's tropical disease research unit in Vietnam.

Spread by the *Aedes aegypti* mosquito, dengue has grown rapidly along with urbanization and globalization because it thrives in tropical mega-cities and is easily spread in goods containing small puddles of water, such as used tires.

Climate change is also making more parts of the planet habitable for the dengue-spreading mosquito.

As a result, half the world's population is now exposed to the disease, mostly in the developing world - but also in parts of southern Europe and the southern United States.

#### MADEIRA OUTBREAK

Last year Europe experienced its first sustained transmission of dengue fever since the 1920s with around 2,000 people infected in the Portuguese archipelago of Madeira.

Farrar said more such outbreaks were likely in future, since the mosquito was already present in southern Europe and there were increasing numbers of people travelling to and from dengue-infected areas.

The researchers estimated that 70 percent of the world's serious dengue cases were in Asia, with India alone accounting for 34 percent of the total. The Americas - mainly Brazil and Mexico - made up 14 percent, while Africa's dengue burden was nearly as large.

The prevalence of the disease in Africa is worrying, since dengue has not generally been seen as a major problem on the continent. The research team said the impact of disease in Africa was being masked by symptomatically similar illnesses, such as malaria.

Hopes for an effective dengue vaccine suffered a setback last year when an experimental shot from Sanofi proved far less effective than hoped in a mid-stage clinical trial in Thailand.

Further large trials of the Sanofi vaccine - the most advanced in development - are still continuing and scientists have not given up hope that it may yet have a role of play.

A number of other experimental vaccines are also in development, although at a much earlier stage.

(Reporting by Ben Hirschler)

**<http://www.reuters.com/article/2013/04/07/us-dengue-idUSBRE93608620130407>**

# 131\_Effects of High and Low Blood Pressure on Your Body

Renita Tisha Pinto, Health Me Up | Apr 11, 2013

**Blood pressure is the pressure exerted by circulating blood upon the walls of blood vessels.**

Blood pressure can be of two types; high blood pressure or hypertension and low blood pressure known as hypotension. Nowadays, more and more people are being a victim of either of the above mentioned blood pressure related problems due to stress, lifestyle changes and junk-food addiction. Both high and low blood pressure can be equally dangerous if it is not treated well. So it's time start controlling your blood pressure before it causes any damage to your body and health. Today, we have a detailed plan ready for you to tackle blood pressure with the help of Dr. K.M. Sunesara - General Physician, Mumbai.

## **High Blood Pressure:**

### **Effects of High Blood Pressure # 1: Artery damage**

High blood pressure can damage the cells of your arteries especially the inner linings. Due to high blood pressure, the pressure exerted on the walls make the artery walls thick and stiff. This constant action on the walls of the arteries can lead to a disease called as arteriosclerosis, i.e. hardening of the arteries. This damage can further block the blood flow to your hearts, kidneys, brain, arms and legs, which can lead to many complications.

### **Effects of High Blood Pressure # 2: Aneurysm**

Due to constant high pressure, the arteries of your walls can be weakened. Over time, when the constant pressure of the blood moving through the weak arteries can cause a section of the artery wall to bulge, it is also known as aneurysm. Aneurysm can be life threatening, as it can potentially rupture and can cause internal bleeding.

### **Effects of High Blood Pressure # 3: Stroke**

High blood pressure also increases the risk of occurrence of stroke. Very high pressure can cause a break in a weakened blood vessel which then bleeds in the brain. This can further cause a stroke.

### **Effects of High Blood Pressure # 4: Eyesight**

High blood pressure can cause blood vessels in the eye to burst or bleed. This can give you a blurry vision, which can ultimately lead to total, or partial blindness.

### **Effects of High Blood Pressure # 5: Heart failure**

The strain on your heart caused by high blood pressure can cause your heart muscle to weaken and work less efficiently. Eventually, this will lead your muscular heart to fail.

### **Effects of High Blood Pressure # 6: Dementia**

Vascular dementia can result from narrowing and blockage of the arteries that supply blood to the brain. It

can also result from strokes caused by an interruption of blood flow to the brain. In either case, high blood pressure may be the culprit. In dementia, a person's thinking, speech, vision and movement is affected.

### **Effects of High Blood Pressure # 7: Sexual dysfunction**

High blood pressure can also lead to the inability to maintain and have an erection, though it is common among men who are 50 years and above. High blood pressure damages the lining of your blood vessels and causes your arteries to harden and narrow, this limits the blood flow. This means less blood is able to reach your penis. High blood pressure can reduce blood flow to your vagina, which can further lead to a decrease in sexual desire or arousal, vaginal dryness, or difficulty achieving orgasm.

### **Effects of High Blood Pressure # 8: Bone loss**

High blood pressure can increase the amount of calcium that is in your urine. This leads to excessive elimination of calcium through urination. This can further cause bone density loss or osteoporosis.

### **Low Blood Pressure:**

#### **Effects of Low Blood Pressure # 1: Nausea**

The most common effect of low blood pressure on the body is nausea. Nausea occurs because the brain doesn't receive enough blood and oxygen due to the low pressure.

#### **Effects of Low Blood Pressure # 2: Fainting**

Low blood pressure can also cause fainting. It is caused due to insufficient blood flow and oxygen scarcity in the brain. When blood pressure drops suddenly, people can get seriously injured because they lose conscious unexpectedly.

#### **Effects of Low Blood Pressure # 3: Cardiovascular disease**

Low blood pressure may cause many serious cardiovascular diseases like heart attack. Cardiovascular diseases arise because the heart can't pump blood to the organs of the body. This happens because the flow of blood becomes very slow in cases of hypotension.

#### **Effects of Low Blood Pressure # 4: Brain damage**

The brain is also seriously affected by the low blood pressure. As the brain can't receive proper quantities of blood and oxygen, the nervous system may experience some complications, like nerve damage, confusion and mental illness.

#### **Effects of Low Blood Pressure # 5: Kidney damage**

Low blood pressure can damage the important function of the kidneys, i.e. elimination of the toxins. So, as a result, toxins may build up in the kidneys and cause serious health problems.

# 132\_Simple Op replaces Daily Drugs for BP Patients

ANI | Apr 23, 2013

**A simple operation which could effectively cure high blood pressure is being tested on patients in Britain.**

The breakthrough treatment could save thousands of lives each year after the trials showed a substantial and permanent reduction in blood pressure and a decrease in drugs needed, the *Daily Express* reported.

It is hoped the technique will end the need for powerful drugs and help many patients come off daily medication completely.

Cardiologists in London and Eastbourne carried out the first half-hour operations using the keyhole process last month and hailed the results as "exciting" after patients experienced an immediate reduction in extremely high blood pressure.

Dr Neil Sulke, a cardiologist at Eastbourne General Hospital, said, "This operation holds the promise of a meaningful long-term reduction of high blood pressure in patients whose blood pressure isn't controlled by their medication."

Mel Lobo, director of the Barts Hypertension Clinic in London, added, "This is a very exciting trial which, if successful, has the potential to expand our array of non-drug therapies for resistant or uncontrolled hypertension. In the long run it could benefit an even wider range of patients with hypertension."

"One might speculate that such treatment may even herald a new era of device-based therapy in which patients may ultimately be freed from the need to take high blood pressure drugs on a daily basis lifelong," she said.

The tests are aimed at significantly improving blood pressure levels in patients who have failed to get their blood pressure under control despite taking three or more drugs.

The trial at The London Chest Hospital, which is run by Barts Health NHS Trust, involves a minimally invasive, catheter-based procedure without the need for a general anaesthetic which places a small device known as a Rox Coupler to divert blood from an artery to a vein in the upper thigh.

It has led to a massive and permanent reduction in blood pressure.

**<http://timesofindia.indiatimes.com/life-style/health-fitness/health/Simple-op-replaces-daily-drugs-for-BP-patients/articleshow/19692414.cms>**

# 133\_ World Malaria Day: Controlling the Killer Disease

April 25, 2013-04-25

Perhaps, the latest report depicting a steady decline in malaria related deaths signals a good progress in fight against this life-threatening disease, although it continues to pose a serious threat to the human race.

According to the latest WHO estimate, there were about 219 million cases of malaria and 655,000 deaths in 2010. Africa is the most affected continent with about 90% of all malaria deaths occurring there.

However, the malaria mortality rates fell by 26% globally between 2000 and 2010 with the WHO African Region showing a decrease by 33%. An estimated 1.1 million deaths from malaria were averted during this period worldwide.

Founded by the WHO during the 2007 World Health Assembly in May, World Malaria Day is observed on April 25 each year since then.

The theme for this year and the coming years is **Invest in the future. Defeat malaria.** The day aims to highlight the need for continued investment and sustained political commitment for malaria prevention and control.

## Malaria in India

According to the World Malaria Report 2011, over 70 percent of the country's 1.2 billion population faces the risk of malaria infection, with an estimated 310 million people — one-third of the total — facing the "highest risk".

While, an estimated one million fresh cases of malaria are reported each year, about 95 percent of the country's population dwells in malaria-endemic areas.

However, there has been a constant reduction in the number of malaria cases in the country in last five years. Recent government data also shows a decline both in the number of malaria cases and related deaths.

According to National Vector Borne Disease Control Programme (NVBDCP), over 1.5 million cases of malaria were reported in the country in 2009 and 2010. The figure fell to 1.3 million in 2011 and to 1 million in 2012. Till March 25, 2013, about 72,327 cases have been reported.

Similarly, the number of deaths in the country related to malaria cases also came down, 1,144 in 2009 and 1,018 in 2010 respectively. The mortality rate further decreased to 754 in 2011 and to 506 in 2012. The number of deaths is only 18 till March 25 this year.

Contradicting the government data, a Lancet study published in 2011 stated that malaria actually killed an estimated 46,800 Indians in 2010. According to World Malaria Report 2011, India had over 10 crore suspected malaria cases but only 15.9 lakh could be confirmed in 2010.

## New Malaria Vaccine

Scientists at the International Center for Genetic Engineering and Biotechnology (ICGEB), New Delhi, claimed to have discovered key antigens and say that the discovery would help in developing a new malaria vaccine against *Plasmodium falciparum*, one of the species of the parasite that causes malaria in humans.

The study, supported with competitive funding from the Bill & Melinda Gates Foundation and the Vaccine Grand Challenge Program of the Department of Biotechnology, was published in Infection & Immunity journal of the American Society of Microbiology (ASM).

## **What is Malaria?**

Malaria is an infectious mosquito-borne disease. The disease remains inextricably linked with poverty as the highest malaria mortality rates are being seen in countries that have the highest rates of extreme poverty.

Malaria is preventable and treatable, but the disease can become fatal by disrupting the blood supply to vital organs if not treated promptly.

### **Causes**

Malaria is caused by Plasmodium parasites, which infects red blood cells. The parasites are spread to people through the bites of infected Anopheles mosquitoes, called 'malaria vectors'.

### **Out of many, four parasites cause malaria in humans:**

**Plasmodium falciparum**

**Plasmodium vivax**

**Plasmodium ovale**

**Plasmodium malariae**

While Plasmodium falciparum and Plasmodium vivax are the most common, Plasmodium falciparum is the most lethal.

Lately, a fifth species, called Plasmodium Knowlesi, has been found to have caused malaria in humans.

## **Symptoms**

Symptoms of malaria usually develop between 10-15 days with fever, headache, and vomiting after being bitten by the infected mosquito.

In children, one or more of the following symptoms can be seen — severe anaemia, respiratory distress in relation to metabolic acidosis or cerebral malaria.

## **Preventions**

Key preventive measures of malaria include awareness of the risk of disease in high risk zone; individuals should protect themselves against mosquito bites, use of insecticidal nets by people at risk and indoor residual spraying with insecticide to control the vector mosquitoes.

Beside, instant diagnosis and treatment can help avoid complications and death.

**[http://zeenews.india.com/news/health/diseases/world-malaria-day-controlling-the-killer-disease\\_21588.html](http://zeenews.india.com/news/health/diseases/world-malaria-day-controlling-the-killer-disease_21588.html)**

# 134\_ Be kinder to your ears, please!

DAILY MIRROR DAILY MIRROR | May 20, 2013

*Research shows modern living is too noisy for our ears. Here's how you can be kinder to them?*

Our ears at all ages are in danger from the sounds of the modern world. Look around and you'll realise that we are personally responsible for most of it — MP3 players, iPods, nightclubs, hair dryers, and motorcycles inflict injury on our delicate and sensitive hearing apparatus. Sound waves entering the ear set off vibrations in the flexible eardrum. Loud noise can test this membrane to ear-splitting points.

## **Here's how it happens**

A chain of tiny bones transmits the vibrations to the cochlea in the inner ear where fluid carries them to rows of hair cells. These stimulate fibres in our hearing nerve along which impulses travel to the hearing centre in the brain, and we hear sounds. The most sensitive bit of this whole chain is the hair cells in the inner ear.

**Very loud noises over an extended period actually kill off the hair cells and once dead, they stay that way. They can't be replaced. This damage to the hair cells further adds up.**

So, every loud Friday night at the club inflicts cumulative damage and you can't go back. Damage in your teenage years shows up as deafness in middle age.

Doctors say, we measure sound in decibels and hearing loss begins at 85 decibels. That is the noise a hair dryer or a food mixer makes — MP3s or iPods inflict worse, mainly because we tend to over use them. In fact, a study in 2006 showed more than one third of adults and more than half of teenagers listened to MP3s with the volume turned up high. It is too loud if other people can hear what you are listening to.

## **Measures to follow:**

But you don't need to shun all of them to protect your fragile ears. There are steps we can all take to protect our ears, even down to wearing ear plugs while you dry your hair. Some MP3 players can produce sound levels equal to a jet taking off. If you listen with earphones that drown out people speaking that's too much, throttle back. Remember, at a given volume, ear buds deliver more noise than headphones that cover the ear. Choose loose ones and never insert them tightly into your ears. Pick only over-the-ear headphones that cut out the background noise so you can listen at a lower volume. Also, beware noisy children's toys; otherwise you're inflicting damage on your child's ears at a very early age.

Avoid cap guns, talking dolls, walkie-talkies, squeaky toys. They are cute but extremely damaging. Toy sirens and squeaky rubber toys can make sounds of 90 decibels — as loud as a lawn mower and just as damaging. At a nightclub, make sure you are standing far away from the speakers and enjoying the music.

**<http://timesofindia.indiatimes.com/life-style/health-fitness/health/Be-kinder-to-your-ears-please/articleshow/20148907.cms>**

# 135\_Health Benefits of Pistachios

TNN | May 20, 2013

**Nobody is a stranger to pistachios, one of the popular nuts often used in many desserts. Botanically they belong to Anacardiaceae family, of the genus pistacia. Besides being tasty, they have numerous health benefits, too.**

## **Healthy Blood and Immunity**

Pistachios are a great source of Vitamin B6, which is essential for the production of haemoglobin, which, in turn, supplies oxygen to the cells, also increasing the amount of oxygen supplied. Vitamin B6 is also great for fostering immunity, the production of red and white blood cells, maintaining healthy a spleen and lymph nodes. In fact, a deficiency of Vitamin B6 lowers the body's ability to fight infections.

## **Beautiful Skin**

Enrich your skin with properties of Vitamin E present in pistachios, as they protect the skin from damage due to premature aging, UV rays and skin cancer.

## **Healthy Vision**

Maintain healthy vision by eating pistachios as they contain two carotenoids, zeaxanthin and lutein, rarely found in nuts. These carotenoids offer protection in the form of antioxidants that curb damage from free radicals. Also, pistachios have been linked to lowering the risk of developing macular degeneration.

## **Beneficial for Diabetics**

Pistachios contain a good source of phosphorus — about 60% of the daily recommendation. It's beneficial for glucose tolerance and breaking down proteins into amino acids. Therefore, diabetic individuals can benefit by eating a handful of this dry fruit.

## **Good for Cholesterol**

This dry fruit is said to reduce bad cholesterol, LDL, and increase good cholesterol, HDL, in the body. This, in turn, helps reduce the risk of cardiovascular diseases.

**<http://timesofindia.indiatimes.com/life-style/health-fitness/health/Health-benefits-of-pistachios/articleshow/19673752.cms>**

# 136\_Potatoes may be one of the Best Super Foods

ANI, Saturday, May 25, 2013

**A new study shows that potatoes are one of the best nutritional values in the produce aisle, providing one of the better nutritional values per penny than most other raw vegetables and delivering one of the most affordable source of potassium of the more frequently consumed vegetables, second only to beans.**

Dr. Adam Drewnowski and colleagues from the University of Washington used a combination of nutrient profiling methods and national food prices data to create an "affordability index," which was then used to examine the nutrients per unit cost of 98 individual vegetables as well as five vegetable subgroups including dark green, orange/red, starchy, legumes (beans and peas) and "other" vegetables.

The results indicated while dark green vegetables had the highest nutrient density scores, after accounting for cost, starchy vegetables (including potatoes) and beans provided better nutritional value for the money.

Potatoes, in particular, provide one of the lowest cost options for four key nutrients including potassium, fiber, vitamin C and magnesium.

Among the most frequently consumed vegetables, potatoes and beans were the lowest-cost sources of potassium and fiber-nutrients of concern, as identified by the 2010 USDA Dietary Guidelines.

"The ability to identify affordable, nutrient dense vegetables is important to families focused on stretching their food dollar as well as government policy makers looking to balance nutrition and economics for food programs such as the school lunch program and WIC," lead researcher Adam Drewnowski, PhD said.

"And, when it comes to affordable nutrition, it's hard to beat potatoes," he said.

The study was funded by the United States Potato Board and adds to the growing database of nutrition science that supports potatoes in a healthful diet.

**In addition, one medium-size (5.3 ounce) skin-on potato contains just 110 calories per serving, boasts more potassium (620g) than a banana (450g), provides almost half the daily value of vitamin C (45 percent), and contains no fat, sodium or cholesterol.**

The study is published in the journal PLOS ONE.

**<http://www.deccanchronicle.com/130525/lifestyle-health-and-well-being/article/potatoes-may-be-one-best-superfoods>**

# 137. New Human Body Part Discovered

By Rose Pastore, Posted 06.12.2013



The human eye, now slightly less mysterious [Petr Novák](#) via Wikimedia Commons

The newest addition to human anatomy is just **15 microns thick**, but its discovery will make eye surgery safer and simpler. Harminster Dua, a professor at the University of Nottingham, **recently found** a new layer in the human cornea, and he's calling it (can you guess?) Dua's layer.

Dua's layer sits at the back of the cornea, which previously had only five known layers. Dua and his colleagues discovered the new body part by injecting air into the corneas of eyes that had been donated for research and using an **electron microscope** to scan each separated layer.

The researchers now believe that a tear in Dua's layer is the cause of corneal hydrops, a disorder that leads to fluid buildup in the cornea. According to Dua, knowledge of the new layer could dramatically improve outcomes for patients undergoing corneal grafts and transplants.

“This is a major discovery that will mean that ophthalmology textbooks will literally need to be re-written,” Dua says. “From a clinical perspective, there are many diseases that affect the back of the cornea which clinicians across the world are already beginning to relate to the presence, absence or tear in this layer.”

The study appears in the journal *Ophthalmology*.

<http://www.popsci.com/science/article/2013-06/new-body-part-discovered-human-eye>

## Indian Surgeon finds New Layer in Cornea G.S. MUDUR

Telegraph, Calcutta, India; June 13, 2013

**New Delhi, June 12:** A Jalandhar-born eye surgeon in England has discovered a previously unknown sheet of tissue in the multi-layered cornea, a finding that he says will make corneal transplant surgeries safer and technically simpler.

The new corneal layer, found by Harinder Dua, professor of ophthalmology at Nottingham University, is a transparent sheet of collagen, the fibrous matrix that also makes up ligaments and tendons. The finding has been published in the research journal *Ophthalmology*.

“The knowledge of this new layer will allow surgeons to understand the (corneal transplant) operation better and make it safer,” Dua, who had studied medicine at the Nagpur Medical College before moving to the UK, told **The Telegraph**.

Scientists had until now believed that the cornea, the transparent window at the front of the eye, had five layers — from front to back, the corneal epithelium, Bowman’s layer, corneal stroma, Descemet’s membrane (DM) and the corneal endothelium.

Dua has now identified a sixth layer at the back of the cornea, lying between the stroma and the DM. Dua’s layer is thin — only 0.015mm of the 0.5mm thickness of the cornea — but incredibly tough, Nottingham University said in a media release.

Modern corneal transplant surgery involves replacing only the specific layers that are scarred or diseased, and not the entire cornea.

While separating the corneal layers, surgeons thus far thought they were separating the DM from the stroma, Dua said. “We’ve shown that the new layer offers the plane of cleavage about 80 per cent of the time, and because it is so tough, it keeps the eye much stronger than it would have been if the DM had been left behind.”

This layer can also be used to support the endothelium in transplant procedures called endothelial keratoplasty, making the handling of the DM transplant safer and technically simpler, said Dua, who was born in Jalandhar, Punjab, the son of an Indian Air Force officer.

In the process of separating the corneal layers, surgeons typically inject air into the cornea, leading to formation of bubbles between its layers. While performing corneal transplants, Dua had certain doubts about the plane at which the air injected in the cornea separated the DM layer. He investigated his doubts using human eyes obtained from UK eye banks and was able to demonstrate through electron microscopy the existence of the new layer.

Dua’s layer could help surgeons better identify where the bubbles will form and take appropriate measures during the operation, according to the Nottingham University media release. If surgeons inject air next to Dua’s layer, its strength would imply that it is less prone to tearing and this would mean a better outcome for the patient, the university said.

The discovery could also have an impact on understanding certain corneal diseases. Scientists believe that a condition called corneal hydrops, a bulging of the cornea caused by fluid accumulation, is caused by a tear in the Dua layer, the university said.

[http://www.telegraphindia.com/1130613/jsp/nation/story\\_17002533.jsp#.UbmKkFS6Biu](http://www.telegraphindia.com/1130613/jsp/nation/story_17002533.jsp#.UbmKkFS6Biu)

# 138\_Four Facial Pains and What they mean

Reema Gehi, Mumbai Mirror | Jul 4, 2013

## *Facial pain, say experts, point to conditions that affect varied parts of the body*

Twenty-three-year-old IT engineer, Dharni Gurnani, made peace with recurrent headaches she had been battling for 10 years. She'd avoid brightly-lit and air-conditioned rooms, and when the pain got unbearable, she'd reach out to a painkiller. "That would sort me out for a few days, but it would be back in three days," she says.

A visit this year to pain specialist Dr Raashi Khatri-Panjabi, however, led to the realisation that the source of the headache was in the muscles of her neck. Gurnani's posture was the culprit. She was diagnosed with the classic turtlehead posture-forward head and sloping shoulders.

The doctor, who says she receives 50 new cases a week at her clinics in Juhu and Colaba, says pain in the orofacial region (face, mouth, nose, ears, eyes, neck, and head) is usually the result of a problem somewhere far from it. Dr Khatri-Panjabi says, "Patients often complain of chronic headaches at the top of the head along with stiffness at the base of the skull that radiates to the tips of the fingers. Often, this is wrongly attributed to stress."

### **4 facial pains and what they could point to**

**A. Symptom:** Deep, dull headache

**Condition:** Neck muscle spasms

**Caused by:** Whiplash (neck injury), poor posture and long hours at computer, physical stress

How does a spasm in the neck muscle play out as a headache, like in Gurnani's case? Medically termed as myofascial pain, this is common and characterised by discrete tender areas or trigger points. The spasm may occur in the centre of the neck muscle but it can play itself out at any point along the length and width of the muscle, like the top of the head. Therefore, a muscle spasm in the neck can show up as a debilitating headache, says Dr Khatri-Panjabi, founder of the Center for Orofacial Pain. "These deep, dull headaches are often referred to as cervical headaches and more commonly as 'tension headaches'. But the tension does not refer to psychological stress but actual tensile forces acting on the muscle, she clarifies.

**B. Symptom:** Ache at base of skull, neck and face

**Condition:** Rounded shoulders (slouching)

**Caused by:** Poor sleeping posture (wrong pillow) and over-exercising upper body at the gym

The shoulder and the head share muscles that pass through the neck. Physiotherapist Poonam Bajaj explains: "The internally rotated (forward rotated) shoulders increase the compression on the collar bone and the attached muscles. There is a shortening of the pectoral (chest) and scapular (shoulder blade) muscles. As the head and neck are brought forward, the patient is forced to extend the back of the neck to keep the eyes horizontal, resulting in over activity of the muscles at the base of the skull." When these muscles are tightened, the head and shoulders are pulled forward leading to Forward Head Posture and rounded or slouching shoulders. The constant effort to bring the head back into its normal position is what causes pain at the base of the skull, neck and face.

**C. Symptom:** Electric shock-like pain in cheeks, near nose and jaw

**Condition:** Trigeminal Neuralgia (TN)

**Caused by:** Blood vessel pressing on a nerve inside the skull, multiple sclerosis

This nerve disorder got famous when Salman Khan was diagnosed with it in 2011. It's an impingement on a nerve branch in the spinal cord or brain stem that shows up as sharp, shooting, burning pain around the nose and above the lips. Neuro-surgeon Dr Keki Turel, says, "The trigeminal nerve has three divisions that subserve sensations over 1) forehead, 2) cheeks, and 3) lower jaw. Though predominantly a sensory nerve, it also has a motor division that supplies the muscles that aid chewing. The nerve enters the brain stem in the trigeminal nucleus and from there it has projections higher up in the brain." All nerves are covered by a sheet called myelin, which works like an insulation around a wire, preventing leakage of current. The trigeminal nerve is myelinated, except in the last few millimetres where it enters the brain stem — here it remains naked, and ultrasensitive. It is this unmyelinated area where throbbing of a blood vessel makes it excitable, resulting in severe pain. This intermittent pain is triggered by even the slightest external stimulation — touch, brushing teeth, chewing, or even a draft of wind. "The pain is so severe, it can drive a person to contemplate suicide, says Dr Turel.

**D. Symptom:** Ache in temples, ear pain, facial soreness, limited range of motion of mouth, clicking and joint noise

**Condition:** Jaw disorder

**Caused by:** Grinding of teeth in sleep, cradling phone between neck and shoulder, biting nails, clenching teeth during a task that requires focus

Temporomandibular Joint (TMJ) or the jaw joint is located in front of both ears and connects the lower jaw with the skull. The TMJ along with the muscles of mastication allows you to chew, yawn, shout, whistle, talk and sing. "Considering it is the most used joint in the body, a TMJ dysfunction can be severely debilitating," says Dr Khatri-Panjabi. "TMJ disorders can be felt as tooth pain even in the absence of dental pathology and can contribute to snoring and sleep apnoea," she adds.

**<http://timesofindia.indiatimes.com/life-style/health-fitness/health/4-facial-pains-and-what-they-mean/articleshow/20908850.cms>**

# 139\_Vegetables That Boost Your Immune System

Cruciferous vegetables are the gold standard in immune-boosting vegetables.

Don't hesitate to load your plate (with a minimum of two) of the following veggies:



1

**Cruciferous vegetables are the gold standard in immune-boosting vegetables.**

Although all vegetables have nutrients and some protective powers, for these vegetables, it's off the charts. Cruciferous vegetables have a special chemical composition: They have sulfur-containing compounds that are responsible for their pungent flavors. When they're broken down by biting, blending, or chopping, a chemical reaction occurs that converts these sulfur-containing compounds into *isothiocyanates* (ITCs). ITCs prevent and knock out cancer and have infinite proven immune-boosting capabilities.

They contain antiviral and antibacterial agents that keep you disease free. Adding the following cruciferous vegetables to your daily plate is like taking an anticancer pill: arugula, beet greens, bok choy, broccoli, Brussels sprouts, cabbage,



2

**Garlic is surely one of the world's most potent medicines, and its potent smell is what makes it so powerful.**

The active ingredient *allicin* turns into *organosulfurs*, which are the compounds that keep your cells safe from all the destructive cellular processes that can cause major chronic diseases. Garlic is a natural antiseptic; it prevents cancer, fights infection, and prevents colds. Research also states that garlic may prevent or decrease chronic diseases associated with age, such as atherosclerosis, stroke, cancer, immune disorders, brain aging, cataracts, and arthritis.



3

**Onions are rich in quercetin, a powerful antioxidant that may reduce the risk of cancer.**

Like garlic, onions also contain the amazing compound *allicin*. Red and purple onions contain *anthocyanins*, the same antioxidants that make berries so robust in healing powers. In addition to being extraordinary at preventing and healing cancer, the quercetin contained in onion makes them a safe therapy for allergies; it also helps prevent heart disease and reduce high blood pressure.

cauliflower, collards, horseradish, kale, kohlrabi, mustard greens, radishes, red cabbage, turnip greens, or watercress.



4

**The power of mushrooms comes from their ability to enhance the activity of natural killer T cells (NKT).**

These NKTs attack and remove cells that are damaged or infected by a virus. Mushrooms are associated with decreasing most cancers and significantly reducing the risk of breast cancer in women. They prevent DNA damage, slow cancer or tumor growth, and prevent tumors from acquiring a blood supply.



5

**Tomatoes are also the richest source of the exceptionally potent antioxidant *lycopene*, a substance that prevents cancer, particularly cancer of the prostate.**

Tomatoes also have high levels of beta carotene, an antioxidant that supports the immune system. They have high dietary fiber and taste delicious raw or cooked.



6

**Beets are an amazing blood purifier.**

Beets are rich in iron and produce the disease-fighting white blood cells. They also stimulate red blood cells and improve the supply of oxygen to the cells. Beets prevent cancer and heart disease, and the detoxifying properties make them good for your organs. Beets are also high in fiber and nourishing for digestive health.



7

**Spinach is rich in beta carotene, which the body transforms into vitamin A, triggering your immune response to keep you well.**

Spinach prevents cancer and heart disease and is rich in the disease-fighting mineral *zinc*. The vitamin C helps you resist colds and infection and keeps your skin healthy; the B vitamins keep you calm and more energetic.



8

**Asparagus's biggest talent is its ability to encourage the body to flush out toxins, due to its natural diuretic abilities.**

Asparagus is both cleansing and anti-inflammatory to the body. It has the antioxidant *glutathione*, which can lower your risk factor for heart disease and cancer. It's useful for all inflammatory conditions, such as arthritis and irritable bowel syndrome.



9

**Artichoke (हाथी चाक - एक प्रकार का कन्द) supports the liver.**

The substance *cynarin* gives artichoke its detoxifying qualities. Artichokes' B vitamins increase mental alertness and strengthen your immunity.



10

**Red bell pepper is bursting with vitamin C, making it a powerful immune builder.**

Red bell pepper's high level of beta carotene turns into vitamin A, making it a strong defense against disease. Although green and yellow peppers are certainly healthy, they're more *superfoodish*. Although they both have similar amounts of vitamin C, red bell peppers have quite a bit more of the superstar beta carotene.



11

**Sweet potatoes are far superior to the run-of-the-mill white potato.**

The orange variety contains beta carotene, which makes them filled with robust antioxidant, antiviral, and anticancer abilities. They're also full of fiber and the vitamin E they contain is healthy for the skin.

# 140\_What causes migraine revealed

Sunday, July 28, 2013

Washington: Adults who suffer from migraine are more likely to have incomplete network of arteries supplying blood flow to the brain, a new study has revealed.

The research conducted by the Perelman School of Medicine at the University of Pennsylvania has found that variations in arterial anatomy lead to asymmetries in cerebral blood flow that might contribute to the process triggering migraines.

The arterial supply of blood to the brain is protected by a series of connections between the major arteries, termed the "circle of Willis."

People with migraine, particularly migraine with aura, are more likely to be missing components of the circle of Willis.

Study's lead author, Brett Cucchiara, MD, Associate Professor of Neurology said that people with migraine actually have differences in the structure of their blood vessels - this is something you are born with.

"These differences seem to be associated with changes in blood flow in the brain, and it's possible that these changes may trigger migraine, which may explain why some people, for instance, notice that dehydration triggers their headaches," Cucchiara said.

In a study of 170 people from three groups - a control group with no headaches, those who had migraine with aura, and those who had migraine without aura - the team found that an incomplete circle of Willis was more common in people with migraine with aura (73 percent) and migraine without aura (67 percent), compared to a headache-free control group (51 percent).

The team used magnetic resonance angiography to examine blood vessel structure and a non-invasive magnetic resonance imaging method pioneered at the University of Pennsylvania, called Arterial spin labeling (ASL), to measure changes in cerebral blood flow.

The study was published in journal PLOS ONE.

[http://zeenews.india.com/news/health/diseases/what-causes-migraine-revealed\\_23128.html](http://zeenews.india.com/news/health/diseases/what-causes-migraine-revealed_23128.html)

# 141\_Six Amazing Reasons to Eat More Almonds

Elderly women in the family have always stressed the importance of eating almonds, be it for school-going children, pregnant women or working adults. Let's delve into the truths behind the tradition.

You must have seen your mum adding a handful of almonds in *kheer* or you might have eaten these nuts which were soaked overnight. The elderly women in the family have always stressed on the need of eating almonds, be it for a school going kid, a pregnant woman or a working man. Almonds help in skin rejuvenation and are great memory boosters as well. So, let us delve deeper into their amazing benefits, and soak in the goodness of these crackling nuts.

## **Clear the Bowels**

The way our skin looks and feels is directly related to how well our digestive system functions. A weak digestive system can lead to constipation, which in turn would cause pimples and acne. Eating almonds on a regular basis helps to increase the levels of gut bacteria in your stomach. And, it is these gut bacteria which are responsible for a healthy digestion, thus giving you a clear and healthy skin.

## **A Rich Source of Vitamin E**

If you have ever visited a skin specialist for acne, dark spots, blemishes or pimples, you would have noticed the doctor prescribing you vitamin E supplements and capsules. Vitamin E contains Alpha-Tocopherol, which nourishes your skin and gives you a radiant glow. And, almonds are a rich source of vitamin E. So, eating almonds will keep all skin ailments at bay.

## **Anti-ageing Properties**

It is a much proven fact that almonds have anti-ageing properties in them. Massaging pure almond oil on the entire face, especially under the eyes, helps in delaying wrinkles. A regular application of it also lightens dark spots and under eye dark circles, thereby giving you a beautiful and even skin tone.

## **Heart-friendly Nuts**

Well, let's put it in simple words- almonds protect your heart. The fibre in almonds blocks the body's ability to absorb fat. Also, these nuts are a very rich source of vitamin E,

monounsaturated fat, magnesium, and antioxidants that increase blood flow. Moreover, their cholesterol-lowering effect helps in maintaining a healthy heart.

### **Memory and Energy Booster**

Almonds help in boosting the power and capacity of your brain. All the essential nutrients that they contain boost your memory, and also reduce the risk of Alzheimer's disease (loss of memory in old age). They have riboflavin and magnesium, which are great energy boosters that allow you to stay fresh the entire day. Not to forget, almonds increase your productivity at the workplace as well.

### **Get rid of that Flab**

Almonds can also help you shed kilos. These nuts have a variety of vitamins, minerals and other nutrients, which are needed to curb your cravings for carbohydrates. And, it is these cravings, which lead to weight gain. So, having them is a good idea if you want to get rid of that extra flab.

*Power packed with energy, almonds are a great snack, all by themselves. So, soak in water, roast or eat them raw, but do include them in your diet.*

<http://in.lifestyle.yahoo.com/6-amazing-reasons-eat-more-almonds-032120368.html>

### **Almonds**

As small as they look, almonds are jam packed with essential fatty acids, fibres and proteins. Almonds are really effective in treating acne. This dry fruit makes excellent face packs as well. For radiant skin, take crushed almonds (which have been soaked in water) and milk. Apply the mixture on your face to remove dead cells and dirt. For your hair, you can use almond oil to add lustre and shine to dull hair.

### **Health Benefit:**

Almonds also improve your haemoglobin and promote blood circulation. They also reduce cholesterol and help in prevention of lung and breast cancer.

<http://www.bollywoodshaadis.com/article/lifestyle--health/health--fitness/5-dry-fruits-and-their-beauty-benefits>

## **142\_Surprising Beauty and Health Benefits of Tea**

By Sreejan Guha Niyogi

Tea is well-known for the broad spectrum of medicinal benefits it provides to its daily drinkers. However, this hot cup of delicacy can become a part of your first aid kit owing to its many other benefits. In unusual places and circumstances, tea leaves can be your solution to a number of beauty and health problems. So, take a look at a few unconventional benefits of tea leaves that will definitely surprise you!

### **Widen your Sleepy Eyes**

Tea leaves can be a perfect solution for your tired and puffy eyes. Just take two tea bags and soak them in some warm water. Place them over your closed eyes for 15 minutes. Tea leaves have a natural astringent known as tannins, which can help to reduce puffiness in your eyes. Tea bags also help you to get rid of dark circles under your eyes.

<http://www.bollywoodshaadis.com/article/lifestyle--health/health--fitness/surprising-beauty-and-health-benefits-of-tea>

## **143\_Pneumonia, Diarrhea kill 400,000 Children in India Annually**

IANS, New Delhi, Tuesday, Nov 12, 2013, 20:40 IST

**India continues to lose more than 400,000 children before their fifth birthday due to two easily preventable diseases - pneumonia and diarrhea - according to a new report released on Tuesday.**

**Many Indian children do not have access to life saving treatment and preventive measures, says the Pneumonia and Diarrhea Progress Report 2013 published by the International Vaccine Access Center (IVAC) at Johns Hopkins Bloomberg School of Public Health in Baltimore, US.**

**The report said India continues to have the largest number of pneumonia and diarrhea cases in the world.**

The country continues to lose more than 400,000 children before their fifth birthday due to these two easily preventable diseases. Many more children suffer from severe illness.

While India has made some progress in coverage of pneumonia interventions and is poised to protect more children from pneumonia and diarrhea with the upcoming national scale up of pentavalent vaccine, its coverage levels for both pneumonia and diarrhea remain below targeted levels, the report said.

Pneumonia and diarrhea continue to be the leading killers of children under the age of five worldwide.

**According to the latest estimates by UNICEF, pneumonia and diarrhea together claimed the lives of more than 1.7 million children under five in 2012 alone.**

"India has taken a few steps in addressing the pneumonia disease burden by introducing the Haemophilus influenzae type B (Hib) vaccine in nine states. The National Technical Advisory Group on Immunisation (NTAGI) has now recommended the vaccine for a national scale up," N.K. Ganguly of the National Institute of Immunology said.

However, India still needs to include other vaccines such as rotavirus and pneumococcal in its national programme while simultaneously strengthening its health systems and improving access to other preventive interventions and treatment solutions, he said.

**<http://www.dnaindia.com/health/report-pneumonia-diarrhoea-kill-400000-children-in-india-annually-1918147>**

# 144\_India is World's Coronary, diabetic Capital

Monday, Nov 18, 2013

**India has earned the dubious distinction of becoming the world's capital of coronary heart disease and diabetes, says a wellness expert.**

Conducting a fitness workshop for journalists at Mumbai Press Club here, leading wellness expert Namita Jain said that several studies exposed the health hazards faced by stress-ridden Indian society. She was speaking on the occasion of 'World Diabetes Day' observed recently.

**According to the World Congress of Cardiology, it is estimated that by 2020, heart diseases will be the cause of over 40 per cent deaths in India as compared to 24 per cent in 1990.**

**"World Health Organisation (WHO) estimates that nearly 200 million people all over the world suffer from diabetes and this number is likely to double in the coming years. In India, there are nearly 50 million diabetics," Jain said.**

The enormity can be gauged from a recent report that states many heart patients are below the age of 30.

**In a study of 350 heart attack patients conducted by a team of doctors, around 9.5 per cent of cases were below 40 years of age and 3 per cent below 30, she said.**

**According to the November 2009 issue of Harvard Men's Health Watch, as many as 10 per cent of all heart attacks in men occur before the age of 45.**

Smoking was invariably a common factor in almost all the young patients. Apart from Smoking, sedentary lifestyle, obesity, stress, high-blood pressure, high cholesterol levels, diabetes, increasing age, family history are some other factors that increase chances of heart ailments.

Jain also touched upon a common problem experienced by many people - indigestion and acidity. This is due to bad eating and dietary habits, especially when we copy the West in their eating patterns, whereas we in India have the most complete and wholesome meal - like Thali.

**"Digest what you eat, eat slowly, chew well, drink water, and watch what you eat will help in somewhat alienating the problem. Your diet should consist of cereals, fruits / vegetables, proteins and fats", she added.**

<http://www.deccanchronicle.com/131117/lifestyle-health-and-well-being/article/india-worlds-coronary-diabetic-capital-says-expert>

**Keep yourself healthy & use your energies for the betterment of the society - IOS**