COMPUTER ASSISTED ORTHOPAEDIC SURGERY
NEW HORIZONS IN JOINTS REPLACEMENT SURGERY
BODY CONTOURING & SCULPTING
SLEEVE GASTRECTOMY SURGERY
Doctor's Diary : Dr. Dilpreet Brar
Face to Face with a Young & Dynamic Neuro & Spine Surgeon
COMMUNICATION SKILLS IN MEDICAL PRACTICE
Life sustaining foods can also threaten life

Stay Healthy This Winter
राष्ट्रीय स्वास्थ्य बीमा योजना

याद रखने योग्य बातें

लाभार्थियों के अधिकार व क्षमता

- RSBY काउंटर पर स्मार्ट कार्ड दिखाएं।
- सत्यापण के लिए उंगलियों के निशान दें (मरीज के न होने पर मरीज के साथ आये व्यक्ति निशान दे सकते हैं)।
- निशुल्क परामर्श पायें।
- इस योजना में भर्ती न होने के कारण एवं जांच तय नहीं है।
- निशुल्क भर्ती पायें (कार्ड नियत राशि से ज्यादा होने पर देन राशि मरीज को अदा करनी होगी)।
- अनुमानित इलाज राशि व शेष राशि को जाने।
- अगर मां (RSBY) के अन्तर्गत है तो नवजात शिशु का इलाज निशुल्क होगा।
- अस्पताल से छुट्टी होने पर ₹100/- यातायात भत्ते की मांग करें।
- छुट्टी के उपरांत 5 दिन तक निशुल्क दवा (यदि हो तो) लें।
- स्मार्ट कार्ड अस्पताल में न छोड़े।

अस्पताल के क्षमता व जिम्मेदारियाँ

- लाभार्थी का सम्मान करना।
- उंगलियों के निशान से लाभार्थी को सत्यापित करना।
- ऑपीडी उपचार सहित निशुल्क परामर्श प्रदान करना।
- भर्ती के दौरान प्रेशिंग (फंक्शन) राशि का पूर्वसभास देने हेतु (RSBY) स्मार्ट कार्ड का प्रयोग करना।
- छुट्टी होने पर लेन देन पूर्ण करने के लिए (RSBY) स्मार्ट कार्ड का प्रयोग करना।
- मरीज को निशुल्क भोजन उपलब्ध करवाना।
- छुट्टी होने पर लाभार्थी को ₹0100/-यातायात भत्ता प्रदान करना।
- मरीज को छुट्टी के उपरांत 5 दिन तक निशुल्क दवाये उपलब्ध करवाना।
- लाभार्थी को (RSBY) स्मार्ट कार्ड से कार्ड गायी राशि की पूर्ण सूचना दें।
- छुट्टी होने पर लाभार्थी को स्मार्ट कार्ड सौंप दें।
- बीमा कंपनी द्वारा उपचार दिये गये निशिक्षण समय अनुसार आंकड़े का स्थानांतरण सुनिश्चित करना।
Dr. P. K. Talwar
Dr. P. K. Talwar is a Senior Plastic and Cosmetic Surgeon & Director of Cosmetic Laser Surgery Centre of India, Greater Kailash - I, New Delhi. He was also associated with the Indraprastha Apollo Hospitals, New Delhi as a Senior Cosmetic Surgeon. (Page : 38)

Dr. Manoj Gandhi
Dr. Manoj Gandhi, is a consultant G.I., Laparoscopic and Obesity surgeon in Mumbai. He is Director of Dr. Gandhi’s Nursing Home. He is also associated with Asian Heart Institute, Apollo Spectra Hospital, Dr. Ambedkar Railway Hospital, Global Hospital & Fortis - S. L. Raheja Hospital. (Page : 24)

Dr. Raju Vaishya
Dr. (Prof.) Raju Vaishya is President of Arthritis Care Foundation & a Senior Orthopaedic & Joint Replacement Surgeon at Indraprastha Apollo Hospitals, New Delhi. He is also well known for his academic contributions. (Page : 14)

Dr. Yuvraj Kumar
Dr. Yuvraj Kumar is a Senior Consultant & HOD of Dept. of Orthopedics at Asian Institute of Medical Sciences (AIMS), Faridabad. Special fellowship from Great Ormond Street Hospital (GOSH), London & Royal National Orthopaedic Hospital (RNOH), Stanmore. (Page : 20)

Dr. Dilpreet Brar
Dr. Dilpreet Brar is the founder, CEO & MD of MEDECUBE Healthcare, an “asset-less” care coordination concierge service venture conceptualized. Dr. Brar has to her credit successful conceptualization, launch and management of over a dozen hospitals across Delhi-NCR and Punjab. (Page : 44)

Dev Rakah
Dev Rakah is a well known writer and social thinker. He is an ex-science teacher, He lives in Mauritius. He has written a number of books including "Nature of Things," “Leaders of Misleaders" & “Thinking green for a better environment”. (Page : 50)

Dr. Murtaza kamal
Dr. Kamal is a practicing pediatrician at Safdarjung Hospital, New Delhi. Dr. Kamal is associated with many medical research journals including Elixir International Journal, USA and International Journal of Medical Pediatric and Oncology. (Page : 18)

Dr Rakesh Kumar
Dr Rakesh Kumar is a consultant in the Dept. of Orthopedics at Asian Institute of Medical Sciences (AIMS), Faridabad. (Page : 20)

Dr. Meera Jindal
Dr. Meera Jindal is Senior Resident in Department of Obstetrics & Gynaecology at Safdarjung Hospital & VMMC, New Delhi. She is in editorial board of Indian Journal of Case Reports. She has multiple publications in scientific journals both international and national. (Page : 18)
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Stay Healthy This Winter

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Health Article

SLEEVE GASTRECTOMY SURGERY : THE PERMANENT SOLUTION FOR OBESITY

Health Update

NEW HORIZONS IN JOINTS REPLACEMENT SURGERY
The Sixth issue of ‘Health Spectrum’ is now in your hands. All previous editions had a great and heartening feedback from different sections of readers as well as the medical community, and we got some collaboration suggestions some of which we accepted with pleasure.

In this sixth issue, we are honoured to share with our readers the profound and thought-provoking articles from renowned medical experts and health providers.

This edition puts spotlight on a number of health issues including Patient Safety in India, Communication skills in medical practice, Computer assisted orthopaedic surgery & Sleeve gastrectomy surgery.

In this issue, we also put focus on Health Care in Winter. In winters you need to take proper care of your health to avoid the common winter illnesses. Winter is already in and we need to take some measures so that we are literally not left in the cold. On one hand you have the pleasing morning chill and on the other hand you have the nip in the air during the night. This calls for some warmth for your system and you need to take care that your health is in a state to enjoy the complete pleasures of the winters. The chill and the hot winter delicacies make us prone to savour the delights without battering an eyelid as we feel lethargic. But then we also fall sick due to overeating, eating not the right foods and tremendous lack of body movements. We are publishing some articles that will help you stay fit and healthy during the winters without failing to soak in the pleasures that are exclusive to the season: We have included articles on Heart Care in Winter, Managing Joint Pain in Winters and How to make morning walks healthier.

Our aim is to be a platform to promote health awareness and offer an avenue for meaningful debates on challenges and problems in the healthcare sector. We also want to empower our readers to lead a happy, healthy and disease-free life. It goes without saying that there cannot be any substitute for a robust health, which is a prerequisite for both physical and mental well being. We have an unwavering goal to meet this objective through the magazine, which can be a trusted friend and counsellor in all aspects of their lives.

However, we want to clarify again that Health Spectrum is a platform for different shades of opinions, and many writers may not may not be conducting clinical trials or research. As such, we do not confirm statements made by any author. The magazine insists that readers should consult a medical doctor prior to following any opinion or advice or using any product or service published in the magazine.

On that note, I invite you to explore this magazine. So please, sit back and dive into this issue’s selection of articles and discussions.

We will look forward to your suggestions and feedbacks for improving the magazine. After all, it is your magazine. We will surely publish the worthwhile comments from our readers.

With warmest thanks,

Vinod Kumar
Be an Angel for Animals!

Adopt a dog from the street or a shelter.

Sunny Leone and rescued dog Kaali for PETA.
Expressing concern over the practice of wrapping, covering or processing foods with newspaper and printed recycled paper materials in India, Shri J P Nadda, Union Minister of Health and Family Welfare had earlier directed The Food Safety and Standards Authority of India (FSSAI) to issue an advisory restricting the use of newspapers as food packaging material. “It has been observed that vendors have been using newspapers in packing and serving food, which is harmful. I urge the public to dissuade the vendors from using newspapers in packing and serving food and not to themselves use too. We have also issued an advisory to this effect to the state agencies and dissuade vendors from using newspapers in packing/serving food,” Shri J P Nadda stated.

“The fact that the newspapers are printed with ink that can be absorbed in the food is well known. The newspaper ink contains many hazardous chemicals which can trigger serious health problems,” Shri Nadda said. The Health Minister further stated that there is a need to improve awareness among small businesses, particularly unorganized sector, and provide clear guidance. “This should be backed up by systematic monitoring and enforcement by authorities,” Shri Nadda added.

According to the advisory, the Commissioners of Food Safety of all States/Union Territories will initiate systematic campaigns for generating awareness among all the stakeholders to discourage the use of newspapers for packing, serving and storing food items.

Following is the text of the advisory issued by The Food Safety and Standards Authority of India (FSSAI):

**Subject: Restricting the use of newspaper as food packaging material**

1. Use of newspapers for wrapping, packing and serving food is a common practice in India. However, this is a food safety hazard. Wrapping food in newspapers is an unhealthy practice and the consumption of such food is injurious to health, even if the food has been cooked hygienically. Indians are being slowly poisoned due to newspaper being widely used as food packaging material by small hotels, vendors and also in homes in lieu of absorbent paper.

2. Foods contaminated by newspaper ink raise serious health concerns since the ink contains multiple bioactive materials with known negative health effects. Printing inks may also contain harmful colors, pigments, binders, additives, and preservatives. Besides chemical contaminants, presence of pathogenic microorganisms in used newspapers also poses potential risk to human health.

3. Newspapers and even paper/ cardboard boxes made of recycled paper may be contaminated with metallic contaminants, mineral oils and harmful chemicals like phthalates which can cause digestive problems and also lead to severe toxicity. Older people, teenagers, children and people with compromised vital organs and immune systems are at a greater risk of acquiring cancer-related health complications, if they are exposed to food packed in such material.

4. Newspapers should not be used to wrap, cover, and serve food or to absorb excess oil from fried food. There is an urgent need to discourage the use of newspaper as food packaging material by creating awareness among businesses, especially unorganized food business operators and consumers on its harmful effects. Suitable steps need to be taken to restrict and control the use of newspapers for packing of food material.

5. Commissioners of Food Safety of all States/UTs are requested to initiate a systematic campaign for generating awareness amongst all stakeholders to discourage the use of newspapers for packing, serving and storing of food items.
Notification of the draft rules for prohibition of misleading advertisements of Ayurveda, Siddha and Unani drugs was issued in the Official Gazette vide GSR No. 396(E) dated 4th April, 2016 to amend the Drugs and Cosmetics Rules, 1945. Comments of the stakeholders and drug manufacturers have been received on the proposed rules.

An anti-diabetic Ayurvedic formulation, AYUSH-82 for management of Type II Diabetes developed by the Central Council for Research in Ayurvedic Sciences (CCRAS) has recently been transferred through National Research Development Council, Department of Scientific and Industrial Research, Ministry of Science & Technology & Earth Sciences, Govt. of India to the interested manufacturers for its commercial manufacturing under proprietary category of Ayurvedic drugs. Complaints about the misleading content of the advertisement of this Ayurvedic drug have been forwarded to the concerned State Licensing Authorities for necessary action in accordance with the provisions of Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 and Drugs & Cosmetics Act, 1940 and rules thereunder.

Regulatory provisions for Ayurvedic medicines are in place under the Drugs and Cosmetics Act, 1940, which is a Central Act applicable throughout the country. Under this Act, Rules 151 to 159 of the Drugs and Cosmetics Rules, 1945 have specific regulatory provisions for grant of license to manufacture Ayurvedic medicines and ensure their safety, quality and standards by enforcing Good Manufacturing Practices. The standards of Ayurvedic drugs and their shelf life or date of expiry are prescribed in the Drugs and Cosmetics Rules, 1945 and Rule 158-B specifically prescribes the requirement of proof of safety and effectiveness of various categories of Ayurvedic drugs. Compliance to Good Manufacturing Practices (GMP) and submission of evidence of safety and effectiveness are required for obtaining license to manufacture Ayurvedic medicines. Need-based regulatory amendments for imposing effective quality control of Ayurvedic medicines are made in consultation with the Ayurvedic, Siddha and Unani Drugs Technical Advisory Board following a stipulated procedure.

Central Government has published Ayurvedic pharmacopoeia in two parts containing quality standards of 645 single Ayurvedic drugs and 202 Ayurvedic compound formulations. Ministry of AYUSH also provides financial support and guidance to the States for quality control activities related to Ayurvedic drugs and a statutory body in the name of Ayurvedic, Siddha and Unani Drugs Consultative Committee is constituted of members from all States and Central Government to advise in the matters of securing uniformity throughout India in the administration of Drugs & Cosmetics Act, 1940 pertaining to Ayurvedic, Siddha and Unani drugs. In order to facilitate emerging trade and export opportunities for Ayurvedic medicines, voluntary quality certification system is administered by Drugs Controller General of India in accordance with the WHO-GMP and COPP guidelines and by Quality Council of India for granting AYUSH Standard Mark and AYUSH Premium Mark to the eligible products.

This information was given by the Minister of State (Independent Charge) for AYUSH, Shri ShripadYesso Naik in reply to a question in Lok Sabha.
Professor A A Shetty awarded prestigious Hunterian Professorship for 2017

Professor A A Shetty has been awarded a prestigious Hunte- rian Professorship and the Medal for 2017 by the Royal College of Surgeons of England for his research on stem cells in articular cartilage repair. Professor Shetty is a Non-resident Indian and a renowned knee surgeon in the UK. He is also a Chair and Director of stem cell research at Canterbury Christ Church University, United Kingdom. Named after the pioneering surgeon scientist John Hunter and dating back over two centuries, this continue to be highly regarded and prestigious awards within the field of surgery and is awarded annually. The Hunterian Professorship is considered to be one of the proudest traditional honours of the college bestowed to surgeons of eminence who have richly contributed to the field of surgery by original research or innovations. The honour of delivering the Hunterian lecture is regarded by surgeons around the world as a great privilege and high accolade awarded to recognize their work.

The Hunterian Lectures

The Hunterian Lectures were founded under the Hunterian Trust, by which the Hunterian Collection was deliv- ered to the Company of Surgeons at the end of the 19th Century. They continue to be highly regarded and prestigious awards within the field of surgery and are awarded annu- ally in stiff competition. Named after the pioneering surgeon scientist John Hunter and dating back over two centuries, past recipients of the Professorship include Nobel Laure- ate Alexander Fleming for discovery of Penicillin, famous surgeons like Treves, Spencer-Wells, Penfield, Darzi, Trotter and Moynihan.

Women's Only Bike Rally for breast cancer awareness

Fortis La Femme organized its first ever Motarde, a women's only bike rally in support of Breast Cancer Awareness on November 27, 2016 in Bengaluru. Breast cancer is now the most common cancer in most cities in India, and 2nd most common in the rural areas. The oft cited cliché that self-awareness is the best defense couldn't ring more true in case of fight against breast cancer. Fortis La Femme ran a 2 month long special campaign, across Delhi & Bengaluru, wherein women were encouraged to learn about breast self-exam and go for mammography and breast checks by a clinician. In addition to this, it will offer a free mammography for 100 under privileged women in association with the Rotary Club of India. The aim is obviously to drive awareness, since on early detection, breast cancer is completely treatable. According to Ms. Anika Parashar, COO, Fortis La Femme, “It’s not only the severity of the disease but also the stigma around it that needs to be addressed. Fortis La Femme is leading the way towards boosting awareness of this disease and is happy to extend support, services and advice to mark Breast Cancer Awareness Month. We see this as crucial to our single-minded campaign for women’s health and wellness.”

Fortis La Femme also honoured Can- cer Survivors at the closing ceremony of the Motarde at Mantri Square Mall, wherein the survivors also shared their experiences and highlighted the importance of early detection. The Delhi edition of this inaugural women’s only Motarde was held on the 4th of December.
Higher smartphone use may up obesity risk in teens: study

Adolescents who spend five hours or more a day staring at their smartphones, tablets or computers are at a higher risk of becoming obese, a new Harvard study has warned.

In the study, adolescents spending more than five hours daily on screen devices were 43 per cent more likely to have obesity compared with those who did not spend time on these devices, researchers said.

They also found that adolescents who spent more than five hours a day on screen devices were twice as likely to drink a sugary drink each day and not get enough sleep or physical activity.

Researchers from Harvard T H Chan School of Public Health in the US studied data from the 2013 and 2015 waves of the Youth Risk Behaviour Surveillance System, which included 24,800 adolescents in grades 9-12.

The survey gathered data on: hours spent on screen devices - including smartphones, tablets, computers, and videogames - and watching television, hours of sleep on an average school night, number of sugar-sweetened beverages consumed in the previous seven days, and frequency of physical activity - at least 60 minutes per day - for seven days.

Researchers found that almost 20 per cent of US adolescents spent more than five hours a day on smartphones, tablets, computers, and videogames compared with only 8 per cent watching more than five hours a day of television.

Watching too much television continued to be associated with obesity and poor diet among adolescents.

Although this study cannot conclude definitively that using screen devices is causing higher rates of obesity, the findings are cause for concern.

“This study would suggest that limiting childrens and adolescents engagement with other screen devices may be as important for health as limiting television time,” said Erica L Kenney from the Harvard T H Chan School of Public Health.

The study appears in the Journal of Pediatrics.

Celebrating the Joy of Motherhood: Baby Shower for Expecting Mothers

Around 40 expecting mothers from across Panchkula took out a day out to celebrate and welcome their babies at a special Baby Shower event organized on 12th Dec, 2016 at Paras Bliss Hospital, Panchkula.

The event was aimed at helping the would-be-mothers better cope with pregnancy and its associated difficulties, and provide them a sense of camaraderie with other women going through the same phase. The event included a ramp walk with dedicated prizes for the Best Glowing Skin, The Most Sparkling Smile and the Best Attire. The celebration also saw the women enjoy in game of passing the parcel during which they performed multifarious activities.

Motherhood is the most beautiful and the most natural thing to happen to women. When the babies arrive in their lives, mothers tend to become extremely busy in catering to the needs of their little ones. So, before this phase, we wanted to give these beautiful women a small fun-filled session of their own to make them feel good about themselves.

The program also included a small session on Lamaze, a supporting course that helps provide women a variety of coping strategies to deal with the process of pregnancy and labor. It helps equip them to deal with the process of labor and respond to the pain with greater confidence and assurance. The Lamaze experts explained to women that giving birth is the most natural thing that comes to women, and all they need to do is develop their mental strength to go through the process with greater ease.
Eliminating Mother-to-Child Transmission of HIV-AIDS

With India’s AIDS control program succeeding in bringing down the rate of new infections by an impressive 57 per cent over the past decade, experts say the next major focus of India’s fight against HIV/AIDS must be the complete elimination of mother-to-child transmissions.

“The total number of people living with HIV in India was estimated to be around 2.1 million in 2015. Notably, children under 15 years of age accounted for 6.54 per cent of the total HIV infected population in India, a bulk of them having been transmitted the disease from their parents at birth. Mother-to-child transmission is the most common way that children become infected with HIV,” Dr Milind Kulkarni, MBBS, DTCD (TDD), C-HIV, Kulkarni Clinic, Pune.

Today, it is possible to prevent perinatal HIV or mother-to-child transmission of HIV/AIDS with effective and sustained use of medication.

“Most people in India are unaware of this fact but it is possible today for an HIV positive mother to give birth to a disease-free child. A number of countries including neighboring Thailand have succeeded in completely eliminating this mode of transmission of HIV/AIDS. India must now aim to achieve this feat as it works to reverse the HIV epidemic,” says Dr Milind Kulkarni.

Out of an estimated 29 million annual pregnancies in India, about 35,255 occur in HIV positive pregnant women. This is the estimate of the NACO Technical Estimate Report (2015) which postulates that in absence of any intervention, over 10,000 babies infected with HIV will be born every year. According to World Health Organization, without any intervention, transmission rates range from 15% to 45%. However, advancements in HIV treatment and prevention have made it possible for infected parents to give birth to healthy children.

“Since HIV is transmitted through blood and blood related products, transmission from an infected mother to a child can happen any time during pregnancy or labor. Putting infected expectant mothers on anti-retro viral therapy as soon as pregnancy is discovered is an essential intervention. At birth, the baby is also put on a brief six-week therapy to combat the threat. This protocol can successfully prevent mother-to-child transmission in most cases. Since, breastfeeding can also transmit the HIV virus, infants born to infected mothers are recommended formula milk as a safe alternative to breast milk,” explains Dr Kulkarni.

All women who are pregnant or are planning to get pregnant must undergo an HIV test to ensure early intervention and the best possible outcome. Also, a woman who is herself not infected but has an HIV positive spouse (sero-discordant couple), can also talk to her doctor about a safe mechanism of getting pregnant. New medications called pre-exposure prophylaxis (PrEP) can protect such women from getting infected. But, make sure you speak to your doctor and follow the medication regimen religiously.

“If an infected woman takes HIV medicines strictly according to prescription every day, before, during and after pregnancy, and ensures her baby receives the required HIV medication for the initial six weeks, the risk of disease transmission reduces to less than 5 per cent. HIV medicines prevent the virus from multiplying, thereby reducing its quantity in the body. Having less HIV in the body reduces a woman’s risk of passing it to her unborn child while also protecting her own health. In some cases, a cesarean delivery helps reduce the risk of mother-to-child transmission during delivery,” adds Dr Kulkarni.

Relentless awareness campaigns and successful use of anti-retroviral therapy has helped India reduce the burden of HIV/AIDS prevalence steadily over the past two decades. India’s new infections were estimated to be at 86,000 in 2015, showing a marked decline by 66% as compared to the year 2000. Even as it reverses the disease growth, eliminating mother to child transmissions in newborn babies is the next major challenge for India’s anti AIDS struggle.

India can successfully eliminate the mother-to-child mode of transmission with sustained awareness initiatives and increasing availability of counseling to HIV positive women.

HIV virus weakens a person’s immune system, making the infected person susceptible to other deadly diseases. While there is no cure for HIV, the disease can be controlled with medication which can allow a person to live long, healthy and productive lives.
Lung Cancer Incidence Rising in Indian Women

It was considered largely a disease of elderly smoking men till 20 years back, but lung cancer incidence is increasing steadily in women as well as in non-smoking men in India today.

“While breast cancer remains the leading cancer afflicting women, the incidence of lung cancers are also rising in the fairer sex. However, low survival rates as compared to breast cancer makes lung cancer deadlier in women. In India, lung cancer constitutes 6.9 per cent of all new cancer cases and 9.3 per cent of all cancer related deaths in both sexes,” says Dr Muzammil Sheikh, Medical Oncologist, Hinduja Hospital, Mumbai.

The incidence is increasing in both men and women but the number of women reporting lung cancer has markedly increased as compared to 10 years back.

“Common causes attributable to this trend are increase in incidence of smoking in women, exposure to second-hand smoke at home, and other environmental hazards including air pollution. Smoking is the most important risk factor which is said to be responsible for almost 80 to 90 percent of lung cancers. Other factors like passive smoking, exposure to asbestos, radon, metals (arsenic, chromium, and nickel) and radiation are some which may lead to lung cancer,” says Dr. Anil Heroor, Head of Dept. of Surgical Oncology, FORTIS Hospital Mulund and Kalyan (Mumbai).

Yet, more than half of the non-smokers who report lung cancer are women, pointing to the fact that apart from environmental and lifestyle factors, biological and genetic differences between men and women also play a role in susceptibility to lung cancer and the risk of dying from it.

Dr Sheikh says some researches have indicated that female hormone estrogen may help certain lung cancer cells to grow and spread throughout the lungs. This may aid the growth of lung cancer in non-smoking women.

“There is also difference in the way lung cancer manifests in men and women. Just as a heart attack manifests differently in men and women, lung cancer too often displays different symptoms in men and women. While the types of lung cancers common in men display more easily identifiable symptoms such as violent cough or coughing of blood, the types of lung cancers usually found in women show more vague symptoms in the initial stages. By the time most women are diagnosed with lung cancer, it has already spread to other organs,” points Dr Sheikh.

Adenocarcinomas of the lung (a type of non-small cell lung cancer) are one of the most common types of cancers found in women as well as in non-smokers. These cancers tend to develop on the outer regions of the lungs, and therefore often spread to other parts of the body before showing clear symptoms. The initial symptoms that occur are these types of cancers are usually vague such as general fatigue, pain in the back or shoulders.

“A large share of non-smoking patients is also women who might have had exposure to second hand smoke all their lives at home. Second hand smoke or the smoke inhaled by a non-smoker inadvertently from his/her surroundings is basically environmental tobacco smoke which constitutes two streams. First is the mainstream smoke or the smoke exhaled by the person smoking a cigarette. The other form is sidestream smoke that emanates from the lighted end of a cigarette or cigar. The latter is more toxic and has higher concentration of carcinogens, according to American Cancer Society. The particles constituting sidestream smoke are also smaller compared to mainstream smoke and can easily make way into the lungs,” explains Dr Heroor.

Lung cancer is among the top five cancers prevalent in both men and women across the world. World Health Organization attributes 1.59 million deaths every year globally to lung cancer. (by Vinod Kumar)
Total Joint Replacement (TJR) represents a major advance in the management of severe, crippling arthritis. More than 5,00,000 patients undergo Total Joint Replacement each year, in USA alone. Joint replacement surgery not only relieves the pain & suffering of a crippling arthritic, but gives a new lease of life to the joint & improves the quality of life tremendously.

The true credit of bringing focus in India on Osteo-arthritis, an age old disease known to human, must go to our beloved Prime Minister, Shri Atal Bihari Vajpayee. many years ago, he was almost written off from the politics by his opponents & rival competitors due to his disabling arthritis, he then volunteered himself for the surgery of Total Knee Replacement of both knees to relieve the agony of his knee pain. Still, many have had their doubts as to its outcome & wondered whether he would be able to survive his remaining tenure as PM. He has surprised every one & proven wrong, as he is now much more active & strong politically & in fact has volunteered himself for the next tenure of PM! His new knees must get a due credit for this, as they have given a new lease of life to PM’s failing knees.

In recent years there has been some revolutionary advances in joint replace-
In recent years there has been some revolutionary advances in joint replacement surgery. Now the other parts of body can also be replaced as that of shoulder, elbow, wrist, finger and ankle joints.

Contemporary Total Knee Replacement (TKR) which is currently one of the most frequently performed orthopaedic surgical procedures, has developed over the past 30 years. Although the goal of TKR is simple, the means of accomplishment are complex as surgeons & engineers strive to design a prosthetic joint that will function like a human knee. Success of the procedure not only is dependent on the skills of the surgeon & his team, but is also coupled with the design of the implant & instrumentation. A scientific sound design must be complemented by easily used instruments & a technique that assumes accuracy & reproducibility.

Although the procedure is among one of the most successful in Orthopaedic Surgery, the debate continues as to the best treatment option regarding TKR- fixed bearing or mobile bearing prostheses. Many of the fixed-bearing prosthetic designs have performed well at 10- to 20-years follow-up, but polyethylene wear, restricted joint mobility & patello-femoral complications have been reported. A newer approach to TKR (Mobile Bearing Knees) has been introduced in an attempt to reduced some of these problems. The Mobile Bearing Knees (MBK) may solve the fundamental mechanical problem of allowing joint mobility while minimise the wear of polyethylene bearings. Hence, MBK not only increases the life span/survival of the artificial joint but allows the patients to fold their knees more to near normal, as compared to
the conventional TKR.

Now, newer ‘High flex knees’ have made it possible for the patients to almost fully bend their knees & to do normal activities of daily living like cross leg sitting & using Indian toilet. There are however, strict patient selection criteria for using these type of joints.

The other major development in orthopedic surgery has taken place in knee surgery, which is called uni-compartmental knee replacement. Now the recovery has become more swift and painless due to better cementing techniques. This surgery is more useful for younger generation because now surgery is also done without using binding materials. The screws and other press fit methods ensure further replacements and adjustments with less difficulty and pain.

In case of hip replacement surgery the method called hybrid hip replacement techniques is becoming common with higher success rates. The younger generation is showing higher success rate. Here the hip joint cup is fixed without cement through screws. The femoral component or the part of bone only needs cementing material. This technique has increased the life of joints and reduced post surgery recovery period. Young patients with arthritis (i.e, Rheumatoid Arthritis, Ankylosing Spondylitis, AVN etc) pose challenges for the surgeons, due to limited life span of artificial joints, requiring revision surgery later in life. The newer bearing surfaces like ceramic on ceramic & metal on metal, surface resurfacing etc are proving to be blessing for young arthritics, as they are likely to provide them long lasting solution to their hip problems. Birmingham Hip Resurfacings (BHR) has now made it possible for patients suffering with hip arthritis to fully bend their hips. These artificial joints are made of metal on metal bearing (with a very low wear rates) & involve minimal bone resection during surgery (bone preserving).

There has been phenomenal improvement in cementing methods for joining the joints. The material used for cementing is poly methyl methacrylate. It has been observed that if cementing is done properly then life of joints also increase and can last for life long. These days better quality cement guns are used. For mixing the material, vacuum mixers with pressurization techniques are used.

Not only there have improvements in the materials, designs & instrumentation of joint replacement surgery, but new techniques of replacing joints using small cuts (Minimally Invasive Surgery or MIS), computer assisted navigation surgery, & robot assisted surgery are becoming popular, as they are likely to provide more accurate placement of artificial joints with minimum of discomfort to the patient.

The future of joint replacement surgery is bright in India. The number of total joint replacements being done in India is increasing at a rapid rate in the recent past. Total Joint Replacement surgery has come here to stay forever, as it has proved worldwide over in the last 3 decades, through its excellent results. The two main problems of limited activities & life span of the artificial joints seems to have been addressed by these newer joints. A great amount of research is being carried out to further improve both the materials used in the replacement parts and in their design to make them function smoothly and as ‘normally’ as possible. With more trained personnel available in time to come & lower cost of prostheses would certainly help in making the TJR to become extremely popular treatment option.

Dr. (Prof.) Raju Vaishya, a surgeon of international repute, is best known for his swift surgical skills in the field of Orthopaedic & Joint Replacement. He has been working at Indraprastha Apollo Hospitals, New Delhi as a Professor and Senior consultant. He is the founder president of Arthritis Care Foundation. Apart from his distinguished clinical work in the field of arthroscopic and joint replacement surgery, he is well known for his academic contributions. He has more than 150 published articles in various International and national peer-reviewed medical journals and has been regularly invited to give lectures, chairing sessions, etc. in Orthopaedic conferences around the world. He has been awarded for the best paper publication on numerous occasions by Delhi Orthopedic Association and Apollo Hospitals. His work was recognized in the Limca book of records in 2012, 2013 & 2015 for doing bilateral Total Knee Replacement in 93 years old gentleman, bilateral Total Knee Replacement in the oldest couple in a single sitting, ACL reconstruction on oldest man.
Let's speak for Patient Safety in India

- Dr. Om Prakash Kansal, Technical Advisor, Injection Safety, Becton Dickinson (BD), Gurgaon (Haryana)

Patient safety is a fundamental element of healthcare and can be defined as freedom for a patient from unnecessary harm or potential harm associated with healthcare.

The statistics are alarming: worldwide, 10% hospital patients see adverse events occur attributed to hospital-related mistakes and unsafe care. Individual studies have reported adverse events from 4–17% of hospital admissions. Of these, 5–21% result in death. In low- and middle-income countries, the risk of acquiring Hospital Acquired Infections (HAIs) goes up by 2–20 times. At any given time, the prevalence of HAI varies between 3.5% and 12% in the developed countries, while in the developing countries, the prevalence of HAI varies between 5.7% and 19.1%.

Why this happens:
Medical literature reports the incidence of hospital acquired infections which the patient may not have when s/he walks in the hospital. However, evidence also suggests that half of these can be prevented by just investing a minor fraction of the budget while planning the hospital systems, pathways, and processes. This is where public-private partnerships come in, as government set-ups usually have insufficient resources to take care of people. The non-allocation of all types of resources in proportion to the workload has also been documented. Often, it isn’t individuals who inadvertently make mistakes, but systems and processes that may not be efficient enough to prevent infections slipping through.

Why we need to act now: The issue is coming into the news with the soon-to-be-launched National Health Assurance Mission aimed at universal health coverage for the entire population in India. In August and September this year, there have been two discussions on patient safety at the national stage and at the World Health Organization. The latter has also released a patient safety policy framework for South-East Asian countries, including India. Many countries in the developed world have “Speak Up for Patient Safety” campaigns. Improving patient safety requires a system-wide effort involving a wide range of actions in performance improvement, environmental safety and risk management, including infection control, safe use of medicines, equipment safety, and safe clinical practice and providing a safe environment of care.

What we need to do:
We must implement the culture of safety such as is observed in the airline industry. Efforts have been made by the National Accreditation Board of Hospitals and Health care providers (NABH) and its different programs, the MoHFW’s National Quality Assurance Mission (NQAS), Joint Commission International (JCI). They have instilled a sense of confidence among patients and service providers alike that a set of minimum standards is maintained in an accredited hospital. The accredited hospitals undertake clinical audits and apply quality assurance processes by design and thus avoid numerous medical errors well in time. The healthcare insurance industry has also played a catalytic role, at least in major cities across India, to indirectly force their clients to improve and standardize the quality of service.

How we can do this: Like many other issues, the challenge of patient safety also needs to be addressed through a multi-dimensional approach. India has robust mechanisms to roll out blood bank safety, organ transplantation safety and basic maternal and newborn health services across, but needs a booster shot for safe surgical practices, safe medications, stricter control on spurious drugs, safe injections, and safe disposal of bio medical waste. We propose the following 4-point program for all stakeholders to take up patient safety issues on fast track.

1. Consider a national Patient Safety week. It should be relevant to all public and private sector health sector institutes and standalone clinics.
2. The MoHFW should continue their efforts to adopt the WHO regional strategy which include nationwide patient safety assessments and capacity development besides behavioral change initiatives.
3. Bureaucrats and technocrats at state and district level should spend just about 15-20 minutes every week on the issue. A ‘dip stick’ at various health institutes would give them a flavor and they could use their administrative skills to fix the gaps at local level to enhance patient safety.
4. Professional and Industry bodies should also develop innovative thoughts and supplement government efforts while providing patient care.

Let us all speak up for Patient Safety in India.
Communication, specially with regards to health care practice has now lately been recognized as being overlooked in the daily medical practice. Increasing gaps are daily being recognized in giving attention to the wishes of the family of the sick. The role of the treating physician is not only limited to the administration of medical treatments but rather extends to the effective and efficient communication of the disease process, indications of the particular therapeutic modalities and prognosis of the disease. A tactful, thoughtful counseling at these times of pain and agony of the family will aid them in coping with the difficult situations and help the treating team too in improving the health care delivery system and self management.

The family members are in a state of confusion and dilemma and are unsure of their roles when their loved once are sick. The emotions can be expressed as helplessness, inadequacy, anger or guilt or loss of control in decision making. This needs to be handled by the healthcare providing team by listening to them and providing them control as
much as possible in the decision making and giving them roles in physical aspects of care. The exact condition of the patient should be honestly communicated to the loved once especially when the patient is critical. It needs to be understood clearly by the health-care imparting team that they are not the only once to make all the decisions regarding the care of the patient and the family also have a role in the same. It is also important to give frequent accurate and truthful information to the family and make them understand the condition, prognosis, pros and cons of the treatment in their language which they easily understand and to answer their queries and concerns very patiently to gain their faith in hospital staff.

It has now been realized that effective communication is not inherited but rather is a skill, which like any other skill the human beings learn. It is advisable that the treating physician has a list in his or her mind of all the things which are to be told to the patients and his or her family which can help them in understanding the disease process and the therapeutic options available and the end results possible, so that any of the important point is not missed. The main issues should be properly communicated and it is advisable not to make repetitions unless and until they are unable to understand it.

The physician should start by introducing him/herself and should make the patients and the family members of his/her role in the care administration to the sick. In the case of very sick and admitted patients, time should be given to the family to accept the serious news about their loved one, as this can shake them up. They should also be encouraged to clarify their misunderstandings and wrong informations. As soon as the patient is stabilized, the family members should be allowed to see him/her, as it decreases their worry and also provides an insight into the condition.

Physicians are needed to support, respect and work with the families of the sick patients. So, a skillful, compassionate and effective communication needs to be incorporated in the practice of the physicians to improve the patient’s outcome, decrease the concerns of the loved once and improve the quality of imparted care from the treating team.
Computer-assisted navigation has gained wide acceptance for a variety of orthopaedic procedures. The use of computer navigation in orthopedic surgery allows for real-time intraoperative feedback resulting in higher precision of bone cuts, better alignment of implants and extremities, easier fracture reductions, less radiation and better documentation than what is possible in classical orthopaedic procedures. There is no need for direct and repeated visualization of many anatomical landmarks (classical method) in order to have good intraoperative orientation.

Navigation technology depicts anatomy and position of “smart tools” on the screen allowing for high surgical precision (smaller number of outliers from desired goal) and with less soft tissue dissection (Minimally Invasive Surgery - MIS). As a result, there are more happy patients with less pain, faster recovery, better functional outcome and well positioned, long lasting implants.

What is Computer Assisted Surgery
It is well documented in the literature that function and longevity of extremities depend on natural or reconstructed bone and joint alignments and stability. A varus knee has a higher risk of developing medial compartment arthritis or early wearing of the poly insert in an artificial knee joint; retroverted or vertical acetabular cup will have a higher dislocation rate; total knee arthroplasty with internally malrotated femoral component will have more problems with patella tracking and so on. Global Positioning System (GPS) is
How does computer navigation Help

- Creates virtual images of tibia and femur
- Gives accurate measurement of tibia and femur cut
- Tells about accurate ligament balancing and perfect alignment
- Tells us the size of implant to be used

Total hip arthroplasty
In total hip arthroplasty the orientation of the acetabular component represents the most important prognostic factor for a successful operation.

Arthroscopic surgery
Computer-assisted navigation is currently being used in arthroscopic anterior cruciate ligament reconstruction in order to improve the accuracy of tunnel positioning and graft isometry. In arthroscopic shoulder surgery, computer-assisted navigation provides multiplanar visualization of the joint and allows for the ideal placement of the anchors, achieving thus maxima-
bone support and increased pullout force.

**Spinal surgery**
Computer-assisted navigation has been used in practically any spinal surgical procedure including spinal decompression, implant insertion and minimally invasive techniques. Both in the cervical and thoracic spine computer-assisted navigation enables the surgeons to achieve an extensive anterior corpectomy, producing a thorough decompression without jeopardizing neural or vascular structures.

**Fracture surgery**
Computer-assisted navigation can be helpful in fracture treatment especially with minimal invasive techniques, such as percutaneous fixation of femoral head fractures with cannulated screws, fractures of the acetabulum, the sacroiliac joint, the tibial plateau and four-part fractures of the humeral head. In general computer-assisted navigation can be utilized in virtually any kind of percutaneous procedure. It allows the surgeon to determine the entry point and angle of insertion of the guide wires in two-dimensional planes simultaneously, thus reducing the need for continuous intraoperative fluoroscopy, the number of necessary drilling attempts, and the surgical time significantly.

**Knee replacement**
Computer navigation in knee replacement surgery is the latest innovation aimed at improving the accuracy of prosthetic implantation and at furthering efforts at minimizing the surgical exposure.

**Conclusion**
Though conventional surgical techniques have been extremely successful, use of computer navigation may improve the already excellent results benefiting thousands of patients annually.

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**Dr Rakesh Kumar** is a Consultant in Dept. of Orthopedics at Asian Institute of Medical Sciences (AIMS), Faridabad.

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**Computer Navigation Advantages**
- Smaller incision & less soft tissue dissection
- The protection of the quadriceps mechanism that is the key component of minimally invasive surgery.
- Studies show that bone cuts can be made more accurately and more reproducibly when guided by computer navigation versus other systems.
- Computer navigation guidance eliminates the need for a rod to be placed inside the intramedullary (IM) canal of the bone.

**Computer Navigation Disadvantages**
- Increased cost of the procedure.
- Extra time
The award of NABH accreditation means that the organisation ensures:

- Commitment to create a culture of quality, patient safety, efficiency and accountability towards patient care.
- Establishment of protocols and policies as per National/International Standards for patient care, medication management, consent process, patient safety, clinical outcomes, medical records, infection control and staffing.
- Patients are treated with respect, dignity and courtesy at all times.
- Patients are involved in care planning and decision making.
- Patients are treated by qualified and trained staff.
- Feedback from patients is sought and complaints (if any) are addressed.
- Transparency in billing and availability of tariff list.
- Continuous monitoring of its services for improvement.
- Commitment to prevent adverse events that may occur.

NABH Accreditation is available for:
- Hospitals
- Allopathic Clinics
- Ayush Hospitals
- Blood Banks/Blood Storage Centres
- Dental Facilities
- PHCs/CHCs
- Medical Imaging Services
- OST Centres
- Small Healthcare Organisations
- Wellness Centres

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As WHO figures at least 2.8 million adults die every year on account of being overweight or obese. Obesity’s global costs hit $2 trillion a year. Obesity a leading cause of liver damage. India is the 3rd most obese country in the world. 70% people in metros are fat or Obese. 30 million of India’s adult population is either overweight or obese and 62 million diabetic. About 18,000 weight-loss surgeries conducted in India in 2014.

According to a study published in the Lancet, India is just behind US and China in this global hazard list of top 10 countries with highest number of obese people. Also as per a recent report Obesity’s global costs hit $2 trillion a year. 30 million of India’s adult population is either overweight or obese and 62 million diabetic Indians exhibit unique features of obesity like excess body fat, abdominal adiposity, increased subcutaneous (under Skin) and intra-abdominal fat, and deposition of fat in ectopic sites (such as liver, muscle, and others). Obesity is a major driver for the widely prevalent type-2 diabetes & Other commonly associated diseases are Obstructive sleep apnoea, Osteoarthritis, Low self-esteem, Depression, Menstrual irregularities, Infertility, Hernias, Cancers and Heart Failure.

What is Obesity
Obesity results from the excessive accumulation of fat that exceeds the body’s skeletal and physical standards for age, sex and height. According to the National Institute of Health (NIH), and increase of 20% or more above your ideal body weight is the point at which excess weight becomes a health risk. Obesity becomes “morbid” when it reaches the point of significantly increasing the risk of one or more obesity-related health conditions (also known as co-morbidities).

Obesity in India
Researches over the last several years have shown that Indian bodies and genetics are different from their western counterparts. Indians suffer from abdominal obesity compared to people in the west whose bodies are uniformly obese. This is the first time India has officially compiled its weight and flab statistics to step up the fight against obese-sity and its direct fallout diabetes.
Options to treat obesity
Obesity is further linked to a host of medical problems like high cholesterol, diabetes, joint pain, arthritis and heart diseases. This makes it essential to treat obesity medically and not just resort to exercise or diet fads. Losing even 5-10% of one’s weight can delay or prevent some of the diseases triggered by obesity. To achieve similar results, one can visit from fitness centers, dieticians and nutritionists. However, for highly obese people with a Body Mass Index (BMI) of more than 32, significant weight loss is extremely difficult to achieve without medical intervention. Hence, surgery alone is the best option to treat obesity in certain conditions. Patients can undergo Weight-loss (bariatric) surgery helps you lose weight and lowers your risk of medical problems associated with obesity. Bariatric surgery contributes to weight loss in two main ways: Restriction: Surgery is used to physically limit the amount of food the stomach can hold, which limits the number of calories you can eat. Malabsorption: Surgery is used to shorten or bypass part of the small intestine, which reduces the amount of calories and nutrients the body absorbs.

Types of Bariatric /Obesity surgeries
Three common types of Obesity (weight-loss) surgeries are: Sleeve gastrectomy, Roux-en-Y gastric bypass & Laparoscopic adjustable gastric banding.

Sleeve gastrectomy
This type of bariatric surgery is now a days the most effective alternative to treat clinically severe obesity. The sleeve gastrectomy reduces the stomach capacity by means of a vertical mechanical suture that turns the stomach’s natural shape of a bag into a tube. If you suffer from morbid obesity, consider bariatric surgery as the best option to improve your quality of life and enjoy your days with your beloved people.

What does a sleeve gastrectomy consist of?
It is a restrictive procedure; by reducing the stomach capacity, the patient feels full after a small intake of food.

Long considered a rich man's disease, obesity has rapidly grown to become one of the most serious lifestyle diseases. With 41 million obese people presently living in India, the country ranks #3 in the world on the obesity index behind U.S and China and 1 in every 5 Indian men and women are either obese or overweight.
Health Article

It is advisable for people with a body mass index of 60 or more, since the risks of intra and post surgical complications for them is very high. In these cases, sleeve gastrectomy is performed before a gastric bypass. This is done so that the patient will weigh a lot less at the time of the bypass, reducing the risks of complications. It helps the patients reduce their weight considerably in 40% of the cases. If these patients also change their eating habits, they may not need a second surgery to complete the treatment. If it is necessary to resort to a second surgery, such as a bypass or a gastric band, the patient will have to wait 18 months. It may also be used as a first option of a restrictive procedure in patients of a BMI of between 45 and 60, if the medical assessment of the case determines so.

**How is sleeve gastrectomy performed?**

It is done by means of laparoscopic techniques. These techniques involve the use of special instruments that are introduced through very small incisions that allow the area treated to be seen on a closed circuit monitor. The incisions that the surgeons make nowadays are of no more than 0.4 inches (1 cm); the surgical trauma they produce is much lower and the post surgical pain much more tolerable. Through these incisions, the surgeon can reach the stomach and, using a special stapler, he makes a vertical suture to divide the stomach in two. One of the sections is shaped like a tube that goes from the esophagus to the intestine. The other one is separated and removed. The staples used are very strong.

**Before surgery**

Before thinking about undergoing bariatric surgery, such as a sleeve gastrectomy, it is important for you to bear the following things in mind: You must be at least 18 years old. Your obesity must not be due to other diseases that could be treated with other procedures. Your body mass index (BMI) should be over 40, or at least over 35 if you suffer from a disease related to morbid obesity. You must have lived at least 5 years with that BMI and failed in your attempts to lose weight by non-surgical treatments. Take your time to think about the important changes in your diet after a reduction of your stomach capacity. Get psychologically prepared to follow these new habits for the rest of your life. Bear in mind that you will not be able to drink large quantities of alcohol. If you are used to drinking a lot of alcohol, you may not be a good candidate for this surgery.

**After surgery**

You will need 3 or 4 days (1 day in intensive care unit and 2 or 3 days in the recovery room) hospitalization after surgery. You will have small adhesive strips on each of the incisions of 0.4 inches (1 cm). You will also have two drainage tubes connected to airtight plastic bottles, one of which will be removed on the third day after the surgery and the other on the seventh day. Seven scars of only 0.4 inches (1 cm) will be distributed on your abdomen in the shape of a diamond; its lower vertex will be on the navel and the upper one at the base of the breastbone.

At first, you will feel discomfort on the abdominal area, but very soon the pain will become milder.

**The Results**

Bariatric surgery procedures have -generally- good results. Apart from losing weight, most of the patients recover physical and psychological health. ■

Dr. Manoj Gandhi, is a consultant G.I., Laparoscopic and Obesity surgeon practicing in Mumbai. He is Director of Dr. Gandhi’s Nursing Home. He is also associated with Asian Heart Institute, Apollo Spectra Hospital (Tardeo), Dr. Ambedkar Railway Hospital, Global Hospital, Parel, Fortis - S. L. Raheja Hospital & Shushrusha Hospital.

His field of specialty is Obesity surgery, Advanced Gastrointestinal Laparoscopic surgery for which he received a fellowship in Leeds Institute of Minimal Invasive Surgery. UK and also Diploma in Advanced Laparoscopic Surgery, European Institute of Tele Surgery, France. He also underwent Robotic Surgery training in Italy. He has vast experience in these specialties and has performed hundreds of procedures in many hospitals across India.

Dr. Ghandhi is associated with a number of associations & Organisations including Indian Medical Association, Indian Association of Gastro Intestinal Endo - surgeons, Association of Surgeons of India, Jain Doctors Federation & Bombay Nursing Home Association.
Deficiency of some of the vitamins like B12 can cause serious health problems, about which many people are not aware. This vitamin which helps in making your DNA is vital to ensure proper functioning of brain, nerve tissues and red blood cells.

If a person is suffering from vitamin B12 deficiency, the production of red blood cells in the body decreases which can lead to anaemia, psychological problems like depression paranoia, dementia and other behavioural problems. The risk of B12 deficiency increases with age. Vitamin B12 is generally not present in plant foods. But, sometimes the presence of B12 analog in them is confused for vitamin B12. These analogs block intake of the vitamin, further increasing the need for true B12. Therefore, it is important to consume animal and dairy products to maintain appropriate levels of the vitamin.

Main sources of vitamin B12 are animal products like fish, meat, eggs, milk and milk products. Generally, vegans who don’t eat animal products at all, are most prone to Vitamin B12 deficiency. Vegetarians and pregnant women should ensure that they eat enough dairy products, fortified grains or multivitamins to meet B12 needs. If the intake of vitamin B12 is not proper during pregnancy, it can lead to developmental delays and weakness in the child born.

People of different age groups require different amounts of the vitamin B12. Hence, depending upon the body requirement, age and medications B12 levels should be maintained. Certain medical conditions like atrophic gastritis, crohn's disease, celiac disease, bacteria growth or immune system disorders can also lead to B12 deficiency. Regular consumption of acid-reducing drugs can also contribute to B12 deficiency. This is because the acid in stomach helps to break down animal proteins that have vitamin B12. Since, the body doesn’t make vitamin B12 one needs to get it from animal based products to avoid serious consequences.

Symptoms of vitamin B12 deficiency develop gradually but can worsen if the condition is left untreated.

**Daily recommended vitamin B12 amount for different age groups**

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Daily amount (Micro Grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>0.9 mcg</td>
</tr>
<tr>
<td>4-8</td>
<td>1.2 mcg</td>
</tr>
<tr>
<td>9-13</td>
<td>1.8 mcg</td>
</tr>
<tr>
<td>14 and older</td>
<td>2.4 mcg</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>2.6 mcg</td>
</tr>
<tr>
<td>Breast-feeding women</td>
<td>2.8 mcg</td>
</tr>
</tbody>
</table>

**Signs and symptoms to know when you are not getting enough vitamin B12:**

- Weakness and extreme fatigue
- Changes in the way one walks
- Tingling in feet and hands
- Depression or irritability
- Mouth ulcers, sore or red tongue
- Changes in behavioural patterns with decline in mental ability
- Disturbed vision

- Pavithra N Raj, Dietician Executive
  Columbia Asia Hospital, Yeshwanthpur
Chilly winds cast a spell as we gear up for another round of winters. Drop in the mercury level dehydrates our skin, causes allergies, and even spurt in joint pain at times, besides normal cold related issues such as fever and flu. But not many of us know that it also increases the risk of heart attacks, particularly in patients who have a previous background of cardiovascular disorders. As the temperatures drop, it becomes difficult to retain heat inside your body. The fall in our body's internal temperature is too dangerous for people living with cardiovascular problems who may suffer from angina or chest pain when exposed to cold weather. In fact, winter is the most vulnerable time for patients having a background history of heart diseases. Studies in the western countries have shown that the number of heart attacks and related deaths are higher in this season as compared to the summers. Not a matter of surprise that December to February is probably the busiest season for cardiologists, and mortality rate due to heart attacks may be as much as 50% higher in winter as compared to summer. **Why the Risk Increases?** The prime reason behind the increase in the risk could be the rise in blood pressure due to drop in temperature level. Arteries become constricted with the fall in temperatures, and consequently the heart has to put forth more effort to pump blood. Besides, winters also tend to increase levels of certain proteins in the blood stream which in turn increases the risk of blood clots. Many heart attacks are caused due to hypothermia, the condition of heart failure due to abnormally low body temperature. Another possible reason could be that cold weather allows smog and pollutants to settle on ground leading to chest infection, which may propel the incidence of heart attacks. On the other hand, shorter and cooler days spent indoors can cause a person to become lethargic and lead to a type of depression known as Seasonal affective disorder (SAD), which can also be a risk factor for heart problems. Evidently, the heart has to work harder in a bid to ensure that warm blood reaches your Heart.
all corners of the body and the body retains heat during this season. Most of the times, this strain can be excessive for people who are already weak-hearted. This is why, the elderly are at a greater risk of heart attacks during winter. On the other hand, cholesterol levels also fluctuate significantly with seasonal change, leaving people with borderline diabetes at greater cardiovascular risk during winter months. Thus, it becomes pertinent to keep a check the cholesterol levels and undergo regular heart screenings.

How to Protect Your Heart in winters?
As told earlier, the risk of cardiovascular disease is much higher in people with pre-existing heart conditions during winter. To prevent the heart from excessive stress, heart patients must avoid indulging in exhaustive tasks. Here are few more preventive measures which you need to keep in mind to prevent the risk of heart attacks and let you enjoy a hearty and healthy winter:

- Physical activities like brisk walking, jogging or yoga helps to reduce high blood pressure and lower the risk of heart diseases. While we all know that exercising regularly is good for our heart, you may avoid going for morning walk on the extremely chilly days as blood pressure naturally spikes in the morning. Instead, try out a walk in the evening before the sun sets.
- Stay indoors as much as possible. The idea is to regulate your body temperature. So, make sure to make good use of socks, gloves and other winter apparels and ensure covering yourself with comfortable layers. Also, make sure bathe in hot water every time.
- During the winters, many people have the habit of overeating. Eating a large meal always puts extra load on your heart. Rather, it is suggested to eat small, healthy and regulated meals at intervals. You must also limit your salt and water intake as is no loss of these from the body due to less sweating.
- People also tend to drink alcohol in the winters with an excuse that it will help them to stay warm. But, too much alcohol can cause arrhythmia (irregular heart beat) and create long term damage for your heart. So, drink moderately if you must.
- Try to be prepared for emergencies and never ignore minor symptoms such as discomfort in the chest, sweating, breathlessness and pain in the neck, jaws or shoulders, and swelling in the feet. Keep emergency pills handy to resolve any panic complaint of sudden chest pain.
As the air turns chilly with the onset of winters, people living with arthritic joints must have noticed a spike in overall discomfort, stiffness, and pain in muscles and joints. People with pre-existing orthopedic conditions normally dread winters as it makes their joints more painful and inflexible. Some people even seem to wonder if cold temperature has a direct link with increase in pain, while some say that they instantly get to feel slight changes in their bones and joints as if it is an indication that winter is here. While there is very little scientific evidence to support the shooting up of joint pain during winter, increase in neck pain, back ache, inflammation and other mobility issues do occur in most arthritis patients as the mercury goes down; in fact, they become more likely to experience osteoarthritis. It is a complex interplay of several factors which makes winters all the more difficult for people with arthritic knees, shoulders, or hip joints.

**Why Elevation in Pain Happens in Winters?**

Firstly, our pain-bearing threshold decreases dramatically as winter comes in. Also, blood doesn’t circulate very
well during this season, and the penetration is too weak to the extreme parts of the body. Barometric pressure shift may lead to discomfort or inflammation in the joints which are not always ready to adapt to the changing weather. This is why even a minor injury or just a little cut may cause intense, piercing pain.

In winters, our body prefers to keep warm blood close to the heart and this may result in decreased blood circulation to the joints, making them more painful and stiff at times. Hence, increase in pain is obviously experienced by people who have had orthopedic injuries or other issues in the past such as a fracture or sprain or bone fusions. With sudden changes in atmospheric pressure, our nerve endings becoming more sensitive, adding to the increased discomfort.

Another very significant cause of rise in joint pain is that our levels of physical activity tend to go down drastically during winter. Many people, especially the elders prefer to stay indoors and hibernate. Most of the times, the daily walking or exercising schedule is also not followed strictly as it seems uncomfortable to step out. Now, we all know how crucial regular workout is to keep joints healthy. When it comes to arthritic joints, mobility is all the more necessary to prevent rigidity. Lack of exercise and physical activity in winters further worsens stiffness in the joints.

How to Overcome Aggravated Joint Pain?

While it is tough to get rid of joint pain completely if you are already living with arthritic joints, the best we can do is to prevent the condition worsening. Staying warm and active is our body’s primitive defense mechanism to combat arthritic pain, especially when the damp weather is in. Here are some more tips you should adhere to keep joint pain at bay during winters:

- **Exercising increases blood circulation and enables warm blood to reach all the peripheral areas of the body including the joints. Regular exercise also helps keeps our muscles strong and healthy. Unfortunately, most of us forego our daily exercise regimen during the winter chill. Remember, you need it all the more during this season. So, if you have already started an exercise plan, make sure to stick to it.**
- **A deficiency of vitamins can manifest in the form of joint pain or inflammation, as they tend to become flabby. You can solve this problem effectively by checking on your diet. Make it a daily habit of taking simple foods such as ginger and turmeric which help in relieving pain. Also, make sure to have vitamin-rich fruits and vegetables such as oranges, cabbage, carrots, spinach, and tomatoes.**
  - If you feel less thirsty in winters, it doesn’t mean that your body needs less water. The cartilage between the joints is a smooth soft tissue responsible for reducing friction. For its surface to remain smooth, it has to remain hydrated. Hence, drink a lot of water to prevent joint pain from worsening.
  - Try to keep moving all the time rather than shrinking yourself into easy chair. Take a morning walk and expose yourself to sunlight as much as possible to get adequate Vitamin D.
  - Low impact activities like aerobics, swimming, weight training, and moderate cycling can reduce stiffness and increase blood flow in the joints. On the other hand, applying an ice-pack can be useful in reducing swelling and alleviate winter aches and pains. Before applying the pack, do ensure to cover the entire knee joint.
  - The most effective therapy to combat joint pain during this season is a combination of physiotherapy and heat therapy. You may use heating pads and blankets to provide additional warmth for soothing muscles and painful joints. Physiotherapy and occasional body massage helps keep muscles and nerves strong and joints flexible.
  - Your doctor may recommend additional support for arthritic joints. For example, braces can be worn to provide more support and stability to the joint. In case the pain is intense, knee braces give a great relief. Do make sure to consult an orthopedic specialist, even if you are having minor pain in joints and muscles.

In winters, our body prefers to keep warm blood close to the heart and this may result in decreased blood circulation to the joints, making them more painful and stiff at times.
Outdoor walks must be avoided if conditions are smoggy. Elderly people and heart patients must take adequate precaution against cold. Morning walks are traditionally considered a very healthy daily exercise that can give the right start to a day by exposing your lungs to fresh air and your muscles to healthy movement. However, in certain circumstances, the practice of morning walks can cause more harm than good.

As winter sets in, doctors at Columbia Asia Hospitals, Gurgaon say it is important to gauge the weather and exercise caution before stepping out for the daily morning walk. Caution is extremely important for heart patients, asthmatic patients and all elderly people who can suffer negative consequences of exposure to extreme cold and winter smog. Morning walk is a very healthy practice. In fact, the most ardent morning walkers never stay indoors no matter how cold it might be outside. However, given the environmental condition in our urban centres, it is important to exercise caution and make some changes to your daily walking routine. The winter smog is the heaviest in the mornings when fog pairs up with vehicular pollution to make a toxic layer of smog that floats around for everyone to breathe. The concentration of harmful outdoor pollutants including the PM 2.5 particles is highest during the morning hours. Walking out in such a condition can be more harmful than good.

Apart from the increased toxicity in the air, the winter air is also the coldest in the morning and inhaling it along with the dangerous particulate material can cause serious allergic reactions of the respiratory system, especially in patients who have asthmatic or bronchial allergies. For heart patients, the winter season is not considered too congenial. Extreme cold weather is believed to put excessive pressure on the heart. Clinical evidence suggests that incidence of heart attacks increase during winters. Heart patients are therefore advised to avoid stepping out in the cold mornings as the extreme cold can put extra load on their already pressurized and fragile hearts. Any extra physical stress can be potential dangerous for people with cardiovascular diseases. However, all this doesn't mean that you give up your daily exercise routine during the inert months. A daily moderate to heavy exercise of at least 30 minutes is highly advisable to prevent lifestyle disease such as diabetes, cardiovascular disease and even some forms of cancer. It is important though to exercise some precautions:

- **Delay your walk timings:** If the mornings are too cold, it is better to wait until a little late to step out for the morning step. A daily walk is essential, it doesn't matter if you do it at 6 am or 10 am. You can wait till the sun is out before stepping out for your daily walk.
- **Watch out for smog:** If there is excessive smog hanging around the sky, it is better not to go out for a walk and shift your workout session indoors. You can ditch the walk for aerobic exercises or any other forms of cardio exercises that can be performed indoors.
- **Wear masks:** If you are an otherwise healthy individual wearing a nose mask can guard you from inhaling the toxic air. However, if you are asthmatic or have bronchial allergies or are a heart patient, even stepping out with masks is not recommended.
- **Protect yourself:** Wearing proper warm clothing in layers is essential to prevent the harmful effects of sudden exposure to cold that can include hypothermia. Make sure you cover yourself well including your nose to prevent cold air from reaching your lungs.
- **War up before you step out:** When it is cold your heart, muscles and body need more time to warm up. It is advisable to warm yourself up with a few aerobic moves inside the house before stepping out.
- **Select guarded routes:** Stay inside your locality or around no traffic zones or lanes as they are likely to have lesser concentration of vehicular pollution. Also, avoid going out in large parks or gardens where your exposure to cold air will be higher.
How to reduce skin problems during winter season

You might love the cool quotient in the wind brought about by the turn of the weather but not your skin! Winter is not a skin-friendly season as dry icy winds leave the skin gasping for moisture. Dry irritated skin, scaly appearance and itchy feel are elements most of us are familiar with; especially those who have excessively dry skin. Not just dry skin, winter also brings up for some people allergic reactions like skin rashes and eczema.

While you cannot control the climate, you can certainly take some measures to reduce the trauma that the cold season inflicts upon your skin. As much as your body needs a transition to winter clothes, you skincare regimen also needs to change to suit the needs of the colder months. Here are some important elements to adopt in your daily regimen:

Change your skincare products: As winter sets in, the moisturizers and lotions you were using in the summers and monsoon season will not work anymore. Get rid of all skincare products that are alcoholic or astringent or water based as they sap away all oil from your skin. Replace them with products that are cream-based. And this means changing everything, right from facewash to cleanser to moisturizer to scrub. Each product you use should be cream based and moisturizing so that the skin's natural oil is retained and augmented. Even sunscreen and Compaq should be moisturizer based.

Take to scrubbing and steaming: As we tend to apply more lotions and cold creams to our skin to fight off the winter dryness, an important byproduct of this is increased clogging of the pores. Creamy skin products mean that more dirt and grime will also stick to your skin after an entire day outdoors. All this amalgamation of excessive applicants plus dirt particles start blocking the pores even if you wash your face thoroughly every day. At the same time, it will stick to the dead cells on your skin and form a layer of dead skin. Not only does it give an appearance of dull skin, it also triggers acne. Steam therapy helps soften the skin and its pores and a mild session with a scrub after that helps remove all material clogging pores along with the dead cells. Adopt this combined therapy at least once a week. This process also makes the skin more receptive to moisturizers and prevents allergies.

Don't give up the sunscreen: Most of us tend to believe that sunscreens are not needed in the winters. This is a very common myth. Jarsh or soothing, the sun never stops emitting harmful UV radiation which doesn't just cause skin darkening and pigmentation but is responsible for skin cancers in the long term. Make sure you keep using the sunscreen, but better turn to a moisturizer based product.

Always wear dry socks: Winter is the season when we wear socks religiously. But we must ensure that the socks are absolutely dry. Even a mild dampness can cause irritation in the skin and even bacterial infections. If the sun is playing hide and seek use an iron to dry your socks but never wear damp ones.

Use humidifier: If you have a central heating system in your home or at office, you would have noticed how the dry air emanating from it saps away all moisture from the air, leaving the skin and lips parched and dry. While heating is important in winters, you can introduce a humidifier in your home to ensure there is enough moisture floating around. It will prevent skin and lips from excessive drying. Add oil to your bath: No matter how much moisturizer you apply, bathing washes it all off. It is a good idea to add a few drops of olive oil to your bath water to give your skin a healing bath. You can also add coconut or almond oil or apply a few drops directly on your body after having a bath.

Check your nutrition: Much like the body, our skin also needs nutrition to fight off the environmental and ageing related damage inflicted on it every day. Vitamin E and omega 3 fatty acids are very important nutrients for the skin. While Omega 3 fatty acids helps the skin retain moisture, vitamin E provides more resilience and vibrancy to it. Increase intake of food rich in this inputs such as fish, olive oil, nuts and cucumbers.

Dr. Bhavuk Mittal
Consultant – Dermatology, Columbia Asia Hospitals, Ghaziabad
Dr. Rahul Gupta is the man behind the department of Brain and spine surgeon at Fortis Hospital, Noida. He was trained at Nagoya Japan, which has made him an expert in Endovascular procedures.

Dr. Rahul Gupta, has rich experience of working as faculty in teaching government institutes. He has performed thousands of complex vascular, endo-vascular, skull base and minimally invasive brain surgeries. He has mastery in dealing with spine ailments. Dr Gupta completed his MBBS & MS (General Surgery) from Government Medical College, Rohtak, and MCh in Neurosurgery from PGIMER, Chandigarh. He has been actively involved in teaching and research activities in the Department of Neurosurgery at PGIMER, Chandigarh and at G B Pant Hospital, Delhi. He has DNB Neurosurgery training under his supervision at Fortis hospital Noida. He does additional bimonthly OPDs at Hapur, Bulandshahar, Modinagar, Muzaffarnagar and Ghaziabad and daily evening OPDs at Indirapuram and East Delhi.

He has been an active participant in academic Neurosurgery meetings and has over 40 platform presentations at National and International Neurosurgery Conferences to his credit, having won two best paper awards. He is an active member of various National and International Neurosurgical and Spine societies like NSI, NSSI, DNA, Skull Base society, Cerebrovascular society, Neurotrauma Society and AO spine society.

He is very sincere, well mannered, honest and kind hearted to his patients.

Dr Gupta, in an interview with Health Spectrum, speaks about the health of Indians, the challenges faced by them and the remedial measures they should adopt for a happy and healthy life.

Q. What are the challenges in the field which you are pursuing.

Ans. Gaining confidence of the patient and providing the best possible treatment is the biggest challenge. Even I want all my patients to be healthy af-
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God has made us able to help others. We should make our planet a better world, a better society. All of us should march together. Love everybody. If you love others, others will also love you.

As a successful doctor, what is the secret behind your success?
Ans. Hard work and passion for Neurosurgery. PGIMER Chandigarh has a very good work culture and all my seniors and colleagues there motivated me to work hard.

What makes you happy or satisfied?
Ans. My patients and results of my surgery make me happy.

How do you see yourself 10 years from now?
Ans. The life of a surgeon starts at around 40 years of age. Now I am 42 and only from 2 – 3 years I have been working in my full throttle. Maybe after 10 years I would like to dedicate myself completely to work and improving my academics. I attend many conferences in India and abroad, so that I continue to learn and improve my skills. When I will realize I have fulfilled needs of my family, I will go for charity and teaching.

Any event in your life, which has influenced you most?
Ans. Major change in my life came when I joined PGIMER Chandigarh for post graduation in Neurosurgery, and next when I joined Fortis hospital. Both places gave me more sense of responsibility towards my career building and professional growth. I was majorly influenced by my teachers at PGIMER, Chandigarh.

Do you have any hobbies or interests?
Ans. My work is my biggest hobby. Whenever I get time from work, I participate in some sport activities like badminton.

What do you think about corporate hospitals?
Ans. I have no complains with corporate hospitals until they do not take healthcare completely as business. Also there should be proper coordination between non medical and medical staff and also the trust on which the doctor patient relationship is built upon should not be interfered.

Which profession would you like your children to go
Ans. The kids of today are very smart and they are capable of deciding their future. I will not pressurize them to take a certain profession. I wanted to become an engineer but my father told me to become a doctor and I had to face many struggles to reach here and I dont think that todays generation would be willing to do so but one can do it if one is determined. My one son wants to become an engineer and other a doctor. Many parents want to make their children doctors as it secures their old age but this is a weird concept. A doctors life is very busy and he may not be available for his family always. Still, the happiness when you treat someone is way beyond anything. One has to work hard for becoming a doctor. I remember that I gave my last exam for my degree when I was of 31.
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Body contouring surgery encompasses a number of different body sculpting techniques used by cosmetic surgeons to reshape almost any area of the body. Through body sculpting surgery, patients can effectively eliminate excess fat and skin that are unresponsive to diet and exercise. Cosmetic surgeons employ a variety of body sculpting techniques to help their patients achieve lean, toned figures, including liposuction, tummy tuck, and body lift surgery.
Arm Lift or Brachioplasty
Brachioplasty, commonly referred to as an arm lift, is a procedure used to remove excess skin in the upper arm. Skin commonly loses its elasticity throughout the arms as a result of natural aging or rapid weight loss. Arm lift surgery tightens and tones the upper arms, restoring a youthful contour. Patients with excess fat on their arms may elect to have liposuction performed in conjunction with other cosmetic procedures for even more dramatic results. Many patients, who had previously been fearful of wearing revealing clothing or of raising their arms over their heads report an increase in self-confidence after the procedure.

Body Lift
Patients with extensive amounts of excess or hanging skin in multiple areas of the body may benefit from a more inclusive, larger scale body lift procedure. More extensive body lift procedures can target the entire body (a total body lift) or specific regions (upper, mid, or lower body lifts). Total body lifts are useful to patients who have lost skin elasticity all over their body. Although full body lift surgery is a complex surgery requiring an extended period of recovery, doctors are often able to achieve the best overall aesthetic results with this treatment. Full body lifts address every part of a patient’s body where fat and excess skin frequently accumulate: the arms, breasts, buttocks, hips, thighs, and abdomen.

Buttock augmentation
Buttock augmentation involves the insertion of butt implants to enhance the shape, size, and appearance of the rear end. Butt implants can be used to add curves and definition to the buttocks, in women and men alike. Some butt implant patients feel their buttocks lack shape, while others want to have a more sensuous rear end by making it fuller or larger.

Butt Lift
Buttock lift surgery, also called "Brazilian butt lift surgery," is an increasingly common plastic surgery technique intended to firm and enhance a patient’s rear end. Like other body lifts, butt lift surgery is useful for removing excess skin while toning and tightening the remaining skin. In the Brazilian butt lift, a patient’s butt is enhanced using purified fat cells from elsewhere in the body. Patients achieve a rounder, fuller, firmer buttock using their own tissue and without the need for butt implants. Butt lift surgery has been shown to be both safe and effective while providing patients with long-lasting, beautiful results. Many butt lift patients report increased self-confidence after the procedure.

Calf Implants
Calf augmentation through the insertion of implants is an excellent option for patients who are dissatisfied with the shape or size of their calf muscles. By and large, men and women choose to undergo calf augmentation for very different reasons. Men more often than not want to emphasize bulk and muscle while women typically seek...

Over the last few years, cosmetic surgeons have seen a steady increase in the number of people opting for fat transfer procedures, particularly moving excess fat cells from the waistline and thigh area and repositioning the cells in the buttocks. This creates the ‘ideal’ feminine hourglass shape with the classic 0.7 ratio of waist to hips. The good news about the procedure is that it can be done on women who are older so struggle to get rid of fat deposits around the waist and midriff because of hormonal changes and reduction of muscle mass as they age. After puberty, we all have a finite number of fat cells spread around our bodies. These fat cells can expand to 1000 times their original size, which means that people are overweight or obese, but their numbers never change. Once the cells have been removed, they can never regenerate in a specific location on their own. So people only need to have this procedure done once in a lifetime, or at the most, twice. It is not a continuous process of revision.
balance and proportionality.

**Liposuction**
Liposuction is the most popular method of body contouring surgery because it allows the surgeon to re-sculpt specific areas of the body. Using only a few tiny incisions, your surgeon can target stubborn fat deposits and permanently remove fat cells from the area. There are many different methods of liposuction available, and you and your surgeon will discuss which technique is right for you.

**Thigh Lift**
Thighplasty, or thigh lift surgery, is a popular cosmetic surgery option for patients seeking firmer, more attractive upper legs. Like other area specific body lifts, thighplasty helps tone and tighten excess, loose, or hanging skin. There are several different types of thigh lift procedures that may be performed, depending upon the patient’s needs and goals. Surgeons can use a bilateral, medial, or inner thigh lift to safely remove excess skin. Thigh lift surgery is commonly performed in conjunction with liposuction surgery for even better results.

**Tummy Tuck (Abdominoplasty)**
The tummy tuck, or abdominoplasty, is a unique body sculpting surgery that combines removal of excess skin and fat from the midsection with the surgical tightening of the abdominal muscles. Abdominoplasty is typically offered as an individual procedure, but may also be performed during full body lift surgery. Areas of the body with unwanted fat, excess skin, and cellulite can be effectively treated with a variety of surgical body sculpting techniques and cellulite reduction treatment options. For those who struggle with a combination of excess skin and fat, removal through surgery is an excellent choice.

**Pec Implants**
Pectoral implants may be an excellent option for men who, even though they exercise frequently, wish to further shape or enhance their chests for the defined, muscular appearance they desire. Pec implants shape, enlarge, and firm the chest muscles. Pectoral body implants help patients achieve the appearance they desire while still allowing for a natural feel and appearance.

**Bicep Implants**
Bicep implants are used to create muscular definition and increased bulk in patients’ arms. These implants can be useful for both men and women who are unable to achieve the upper arm toning they desire, even after extensive muscular conditioning. Not only can bicep implants improve the appearance of the arms, but they can also bring the entire upper body into better proportion.

**Cellulite**
Non-surgical cellulite reduction treatment can be performed using a variety of techniques. One of the most popular and effective treatments for reducing the appearance of cellulite is Lipomassage™ by Endermologie®,
which combines mechanized suction and therapeutic massage to break down fat cells, release water retention, and smooth the thighs, buttocks, and hips. Similar cellulite-reducing systems that employ radiofrequency (RF) treatment, such as VelaSmooth™ and VelaShape™, have been shown to offer additional skin tightening results. Mesotherapy and Lipodissolve™ are two other non-surgical approaches to cellulite reduction. These treatments involve the injection of fat-reducing solutions to catalyze fat loss and smooth the appearance of cellulite. Mesotherapy and Lipodissolve™ may also be used in combination with body wrap treatments designed specifically to accelerate fat loss and tighten the skin.

Excess Skin

Whether excess skin is the result of a pregnancy, dramatic weight loss, or the aging process, excess skin and fat removal surgery is specifically designed to target your problem areas. Abdominoplasty, or tummy tuck, is a surgical procedure in which excess skin and fat are removed from the midsection and the underlying abdominal muscles are tightened to slenderize the waist line. Other, more extensive procedures, such as full body lift and lower body lift, trim excess skin and fat along the thighs, hips, buttocks, and waist. More localized lift procedures such as an arm lift, thigh lift, butt lift, and breast lift are less intensive procedures that focus on excess skin and fat removal from one specific area of the body.

Fat Removal

The most effective surgical fat removal treatment is liposuction. Liposuction removes excess fat from below the surface of the skin through tiny incisions. There are many different types of liposuction, including ultrasonic assisted liposuction (UAL), tumescent liposuction, LipoSelection®, and power assisted liposuction (PAL). Each type of liposuction has its benefits and risks, and an experienced cosmetic surgeon can help you decide which procedure will work best for you. Unlike other body contouring procedures, liposuction does not involve excess skin removal and is not an effective cellulite reduction treatment. Mesotherapy and Lipodissolve™ are non-surgical fat and cellulite reduction treatment options. Both treatments involve the injection of specially formulated solutions beneath the skin to break down and eliminate fat and cellulite. There are no incisions required to perform these fat removal treatments; however, since the fat cells are not surgically removed from the area, the appearance of fat is more likely to return than with liposuction.

Who Is a Good Candidate for Body Sculpting Surgery?

Candidates for body contouring treatments should be in good overall health, have good skin elasticity and skin thickness, and have reasonable expectations for the outcome of fat removal, cellulite reduction treatment, or excess skin removal surgery. Some body sculpting techniques, such as a total body lift, involve intensive surgical procedures. In such cases, candidates may have to meet additional health requirements before they can proceed with surgery.

Dr. Talwar is one of the leading cosmetic and plastic surgeon in India. Since 1996 he has been running Cosmetic Laser Surgery Centre of India. He was also associated with the Indraprastha Apollo Hospitals, New Delhi (India) as a Senior Consultant, Cosmetic Surgeon. His clientele includes Top Models and Film Stars from neighbouring countries, Sport Stars and a lot of foreign tourists.

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In Yoga, it is said that ‘What you eat is what you are.’ Meaning the food has a direct impact on human mind, personality and behavior. After all Yoga is basically a healthy lifestyle for spiritual upliftment! The Science of Yoga has both, ideology and technology: suggestive theory and practical methods. Yoga suggests and supports vegetarian diet, naturally grown fruits and vegetables, all grains, pulses and dairy products as a healthy diet with few options. The options are available to those who have reached the higher level of understanding and perception. The yogic diet emphasis vegetarian and dairy products for mainly two reasons, firstly: The principles of Yoga are based on the laws of the Mother Nature and secondly it purely believes in the core nature. The more you are close to the nature you are more healthy, the more you are away from her you are more sick and ill and most unhealthy!

The first step in Yoga practices is ‘Yama, meaning restrains. Which covers the concept of ‘Ahinsa’ meaning non-violence, non-hurting, non-killing and non-injury. Mother nature has given supremacy to man by giving and providing more intellectual power compare to other creatures on earth. The virtue of Non-violence is to curb that power. Man has no right to kill or hurt any other creatures. Yoga practice thus restricts the act of man so he can’t misuse his powers.
on other creatures. In other words there is a straight message to eat live and survive on the products naturally grown or cultivated by man in order to cover the needs of the human population on earth.

There is always a debate and discussion that plucking and cutting any fruits, vegetables, plants and trees, is also an act of violence. Yoga gives further explanation that you have only right to cut which, is grown naturally or cultivated by man himself! The seed itself has no life. You put life into it by providing land, manure, water, your efforts and care. So you have a right to pluck and cut! You are the cause and reason of that life. So for survival, cutting any naturally grown and cultivated plants or plucking fruits from a tree is not considered as an act of violence or sin as per the law of nature and Yoga.

Yoga science further explains that why vegetarian diet is good? It also gives scientific explanation at both levels: physical and mental. Physically:
• Vegetarian diet is easy to digest because it is natural. E.g. The protein from any beans or dairy product is easy to digest than an animal protein.
• Vegetarian diet takes 3-4 hours to digest while non-vegetarian diet takes 6+ hours to digest. The body and specially the organs of the digestive system have to work more and hard to digest heavy foods.

Mentally:
Our great Yogis were observers of the nature. They have studied the Nature very minutely and precisely. Milk is the first food taken by all babies: human or animal! A very natural form of food for any life! Produced by the body and for the nourishment of the body! So all the natural form of dairy product is covered in Yogic diet. Again animal milk is a question of debate and discussion but we all know that we use the milk from animals those are domestic and survive on grains, grass and plants - the natural foods. E.g. cows, goats, camels etc. Plus the priority is given to their babies and human - the caretaker or owner, uses remaining extra milk!

In the category of domestic animals we have to consider elephant, horse, donkey, bull etc though they are strong, their strength and power is useful, they offer their services to the owners! The violent and wild animals: tiger, panther, lion, they attack and kill others. Now just compare their nature, behavior and food they eat and you will get the answer!

In other words it proves that even in animal kingdom, those who are eating natural veggie food are more calm, useful and stronger animals! Their strength is useful. While wild animals are always angry, irritated, agitated and restless. They are strong but the strength is wasted in fulfilling their needs, instincts, power and desires!

The same principle applies to man! Here we get the straight message from the nature that which type of person you would like to be? Calm, cool controlled and at ease or angry, agitated and restless? As I’ve mentioned earlier that in Yoga it is said ‘what you eat is what you are!’ I hope that the explanation given by our great Yogis is enough to understand that why Yoga practically suggests, supports and encourage vegetarian diet! Choice is your! To eat vegetarian diet or non-vegetarian!

By Manjari Bhatt
Leading From The Bottom Up Gave Me The Confidence To Start My Own Business

The year was 2006. At 7:30pm on a winter night, just as I was packing up to leave for home, the pipeline transporting oxygen from the gas plant in the back of the hospital broke. In an event of one in a million probability, the back-up pipe broke too. We had four hours of emergency-reserve oxygen—in cylinders—in the hospital.

Plan A: Bring in more cylinders, while the pipeline gets repaired. We rushed to implement this plan. Alas! It was late in the day, and the supply in Delhi was bleak. Bringing in cylinders from the storage plants outside the city would take a few hours. And it wouldn't be enough anyway.

My experiences and gave me two things: a restlessness to feel that I should start something of my own, and the confidence to actually do it. We knew we had to get to Plan B without losing any time.

Plan B: Repair the pipe ASAP. Problem, it was too late in the day. By the time the welders would show up, troubleshoot the problem, and fix the leak, we would be out of the reserve supply.

My anxiety, which despite my best attempts to hide it, caught the eyes of one of the technicians—an in-house go-to guy for debugging software, servicing medical equipment, and most things in between. He said something. Not in words, but by dropping his backpack, rolling up his sleeves, and gesturing to me: let’s go. Then he said out loud, very tentatively, “Ma’am, I have watched the welders enough number of times. We have the welding machine lying in the basement. All I need is a helper and a cylinder of cooking gas.” What followed was nothing short of Herculean. Two of my technicians on a rickety ladder, 15 feet from the ground, one holding the cylinder and the other welding the broken pipe, for the next three hours, while I stayed at the bottom of the ladder—mostly for moral support. Meanwhile, I made arrangements for two backup workers so that they could work in 30-minute shifts and switch roles.

Needless to say, we did not run out of oxygen. The welding was done in time, with an hour of reserve supply still to go.

Also, a new management principle was coined, “Leading from the bottom.” Literally, and metaphorically. The hospital was none other than Max Super Specialty in Saket, New Delhi. I was the general manager of...
the hospital. Coincidentally, at that time I was also a single mother of two, coaching one of them through a school-crisis over the phone while the gas pipeline saga—and my self-discovery as a leader—was unfolding. Next morning, we did a small prayer ceremony and "prashad" at the hospital, and "celebrated" the deed of the night before. Later that year, the chairman’s award went to my welding heroes.

Let’s rewind the tape. My father was an engineer, and my mother, a school principal. Growing up in what felt like a very privileged upbringing—the pride and fiscal priorities of my middle-class parents were obviously well-placed—I finished my 12th grade in Ludhiana, and my medicine degree from Patiala, in 1988. After a series of short stints at various clinics and hospitals, I finally arrived at Max in 2002. Little did I know that this assignment and what was to follow would become my de-facto school for my leadership training. I started as the medical head at the new day care ten-bed clinic. Working very closely with the founder and chairman, I went on to launch and run each of the ten new hospitals of Max Healthcare, over the next ten years.

Some journeys in life are best undertaken to reach a destination. Some, on the other hand, are best done for the joy of the journey. Alongside this intense journey, I also attended the General Management Program (GMP) at Harvard. My one learning from that: having the luxury of working with a demanding boss and a great coach has no substitute—Harvard included (despite all the phenomenal learnings I had during the GMP).

After this, I spent four years at Fortis—launching and running their flagship hospital, the FMRI. My experiences and gave me two things: a restlessness to feel that I should start something of my own, and the confidence to actually do it. It would mean leading from the bottom up again. I took the plunge and the financial risk, nearly a year ago, and launched a healthcare concierge service that eliminates the hassle from healthcare by addressing the key friction points. Some journeys in life are best undertaken to reach a destination. Some, on the other hand, are best done for the joy of the journey. For me, the latter comes from simplifying life—part by my andaaz towards problems, and towards their source a nazar-andaaz.

Dr. Dilpreet Brar is founder, CEO & MD of medECUBE Healthcare, an “asset-less” care coordination concierge service venture conceptualized. In her career spanning over 25 years, Dr. Brar has to her credit successful conceptualization, launch and management of over a dozen hospitals across Delhi-NCR and Punjab.

After completing her medical education from Punjab University in 1981, Dr. Brar spent immersed herself into clinical practice in Chandigarh and Ludhiana. She shifted to Delhi to join Indraprastha Apollo Hospital as a Resident Medical Officer in and thereafter ascended the corporate ladder to hold many prestigious management positions. At Max Healthcare, she served as an Executive Director till October, 2011 and moved to Fortis in November 2011 to inhabit the office of Regional Director. She steered FMRI (Fortis Memorial Research Institute) from its inception in August’ 2012 it becoming a $100 Million business in 3 years.
Tips to stay a healthy, happy and fit mom

**TIP 1**
**ENERGY IN—ENERGY OUT**
Your daily intake of energy through healthy eating should balance with the energy spent through physical activity. If the intake is greater than energy spent, there is positive energy balance and weight gain. Likewise, when the energy spent is higher than the energy intake, there is negative energy balance and weight loss. During pregnancy eat healthy and stay active; do not try to lose weight. Post pregnancy, begin a healthy exercise routine that will help you lose weight in the longer term.

**TIP 2**
**KINOW YOUR ENERGY GIVING FOODS**
Macronutrients: provide energy (carbohydrates, proteins, fats) Micronutrients: help in the functioning of the body (vitamins & minerals) Ensure that you do not eat more calories than what you can burn through physical activity. If you consume more calories than what you can expend, you will end up gaining weight.

**TIP 3**
**HAVE A RAINBOW ON YOUR PLATE**
Make half of your plate fruits and vegetables at every meal. Avoid foods that are deep fried or highly sugared sodas as they provide excessive empty calories.

**TIP 4**
**NOT ALL FATS ARE BAD; SOME ARE GOOD; SOME EVEN ESSENTIAL**
Healthy fats like mono and polyunsaturated fats found mainly in liquid fats like oils are good for health as they reduce bad cholesterol (LDL) and increase good cholesterol. Saturated fats, which are typically solid at room temperature like butter or ghee should be consumed in lim-
its as they tend to raise bad cholesterol and reduce good cholesterol that may increase health risks.

TIP 5
CHOOSE YOUR SNACKS SMARTLY
Pick nutrient rich, low/med calorie, high satiety foods that keep you fuller longer. Eat often and have smaller portions if you feel nauseated. Choose lighter snacks instead of heavy greasy snacks as it may increase heart burn and gastric issues in pregnant women.
Nuts-Rich in proteins, fibre and essential fatty acids (good fats)
Dairy foods-Rich in proteins, calcium, vitamins A/D and essential fats
Eggs-Proteins, vitamin A/D and essential fats
Salads, vegetables, fruits-Fibre, Vitamins, minerals, phytonutrients
Soups with vegetables-Hydration, water soluble vitamins, fibre

TIP 6
DON’T AVOID, TAKE SMALLER PORTIONS
Make sure you take smaller portions, and enjoy a treat every now and then. Start with smaller portions, eat slowly and as our mom’s say, ‘food is not running away’. Another way to control your portions, is to use smaller plates. Remember however, in pregnancy you need 300kcal extra per day than your usual intake!

TIP 7
3 MEALS AND 2 HEALTHY SNACKS
Three healthy meals and two healthy snacks is a great plan for most people. 200 calories or less is sufficient for a snack. Enjoy desserts, dairy foods as extra calories are important for your growing baby and calcium from dairy foods is helpful. Watch the portions and the calories though!

TIP 8
CUT THE SALT!
Reduce salt intake as excessive consumption of salt raises blood pressure and increases insulin resistance. In pregnant women, excessive salt intake increases the risk of PIH (Pregnancy induced hypertension) that leads to further complications if not corrected. WHO recommends 5g/salt per day per person. This is 1 tsp of salt from all sources. All foods contain sodium naturally, enjoy them naturally. Remove table salt. Taste food before adding salt. Avoid pickles, papad and salted snacks.

TIP 9
DRINK ADEQUATE FLUIDS EVERYDAY
The human body is made up of 45-70% water. Water regulates body functions and body temperature. Without water humans can survive only for a few days. A pregnant and lactating mother should take plenty of fluids including 8-12 glasses of water per day. Drinking water reduces the risk of preterm labour and some women find that drinking water regularly helps relieve symptoms of morning sickness, acidity and heartburn and indigestion. It also helps in keeping your body cool and maintaining your temperature, especially in the hot and humid months. It helps improve lactation as well.
Fluids include water, milk, buttermilk, juices, water ice, ice cream, tender coconut water, milk shakes.

TIP 10
EAT MINDFULLY
Mindfulness involves being conscious of the activity you are indulging in. Eating during times when not hungry can lead to mindless eating. It can lead to bad choices that is neither enjoyed nor nourishing. Avoid emotional eating. Enjoy eating with the family.
It is common for couples to wonder whether sex and pregnancy are safe together. This is because right from the start there have been a lot of myths harboured among expectant couples about pregnancy-sex. Unless your doctor advises you otherwise, sex during pregnancy is safe for both you and your baby. The baby is protected by the amniotic fluid in the womb, by your abdomen, and by the mucus plug which seals your cervix and helps guard against infections.

**Sex during pregnancy has a host of benefits, here are a few of them.**

**Improves circulation in the body:**
During pregnancy blood supply in the body almost doubles to meet the requirements of both the mother and the baby. However, a sluggish circulation can hamper the process. Sex helps restore the functioning of the body with the release of certain hormones and ensures proper circulation. This means the fetus receives an adequate supply of oxygen and nutrients when in the womb that aids growth and development. Here are three exercises that boosts circulation during pregnancy.

**Greater satisfaction and better orgasm:**
Many pregnant women experience better orgasm during pregnancy than their pre-pregnancy phase. The reason behind this is pregnancy increases production of two hormones in the body – estrogen and progesterone. With increased estrogen in the body there is more flow of blood in the pelvic area, which makes a woman more aroused. Increased blood supply also makes the nipples grow large and the never-endings more sensitive. With such increased sensitivity in the sensual areas, women can achieve a better orgasm and sex is usually lasting and intense.

**Strengthens the pelvic floor muscles:**
Regular sex during pregnancy can help keep your pelvic floor muscles toned and strong to help you deal with the arduous phase of labour. However, this is no reason to give floor exercises and Kegels a miss.

**Boosts immunity:**
Pregnancy is the time when a
woman’s immunity is low. Apart from diet and lifestyle modification, sex plays an important role in boosting one’s immunity. This is because sex increases level of IgA antibodies in the body that boost immunity and save one from seasonal cold and flu that is common during pregnancy.

**Better bonding:**
Sex during pregnancy leads to release of endorphins in the body that makes both the mother and the baby happier by reducing levels of stress. Apart from this, sex definitely ensures better bonding and intimacy between partners as it also increases production of oxytocin, a hormone responsible for attachment and love, which helps pregnancy progress without complications and promises a less painful labour.

**Improves your sleep:**
Better sex, better bonding and a surge in endorphins helps an expectant mother to sleep better to fight fatigue and other nagging symptoms of pregnancy.

**Prevents pre-eclampsia:**
Pre-eclampsia or a rise in the blood pressure sometime during the second trimester of pregnancy is common among many women. While diet, medication and other lifestyle changes can help counter this problem effectively, sex during pregnancy can do wonders to keep pre-eclampsia at bay. The reason being the man’s sperm has a special protein called HLA-G that helps regulate body’s immune system and lowers blood pressure levels in a woman during pregnancy.

**Sex and Contraception after childbirth**
Generally, you should refrain from intercourse until after the bleeding has stopped for a few days and you feel more comfortable. This time is needed to allow for tissue healing and to prevent infection. It may take longer depending on your own recovery and if you had a caesarean.

**Physical Changes**
If you are breastfeeding, it is common for the vagina to be drier and extra lubrication may be needed. As a new mother, your body will function differently after giving birth. If nursing, your breasts may be tender, full and may leak at any time.

**Emotional Adjustments**
Adjusting to a new baby can leave new parents drained and interest in sex can vary with the amount of rest you get. Especially in the first few months, there may be little energy left for sex. Consider making love when the baby is fed and napping. Do not be surprised if your first attempts are interrupted by the baby!

The attempt at being super parent and partner may leave you both exhausted and subject to postpartum depression. Try to have patience with each other and yourselves. Open communication is perhaps the single most important factor in a satisfying life together, of which sex is only one part.

**Contraception**
Breastfeeding is not a reliable method of contraception. Even though you may not have a period, you may ovulate. Since the time of first ovulation after childbirth varies from woman to woman, it is important to use contraception as soon as sexual intercourse is resumed. Discuss about birth control mechanisms with your doctor at your postpartum visit.
Food is essential for life; it repairs and builds up new tissues. Our physical and mental health, as well as our behaviour depends on what we eat. However, one ends up with all sorts of health problems when one overeats. So, the same life supporting food, when abused, becomes a poison. Some people have the habit of gobbling up whatever they can, from sunrise to late night, without realizing the harm they do to themselves. It is a common feature in the modern society, especially. There is also the influence of ingenious advertisements that glorify maximum consumption to get maximum pleasure and enjoyment. After being subjected to vigorous brainwashing, the immature and credulous youth get infatuated with the idea of consumerism to the extreme. Modern man is eating too much, too richly and too quickly. But the quality of life does not improve by overeating; moreover, longevity is not proportional to gluttony. Even the elixir of immortality, when over consumed, can become harmful. It is said that, only one third of what great eaters consume, keeps them alive, and the other two thirds, keeps the doctors alive!

Just to eat more and more, the flavour of foods is enhanced and made tasty. Incidentally, Indians seem to be experts in the consumption of additives. Examples of additives are: salt, sugar, spices, etc. Among all additives, salt and sugar are the most common ones. They are not strictly ‘foods’ but they are regarded as indispensible commodities and a must in every kitchen. Cooking without salt cannot be imagined. Nevertheless, salt-eating is an addiction; it is disastrous for health. It opens the door for high-blood pressure, kidney problems, liver disorders, oedema and other degenerative conditions. Similarly, sugar is another addictive chemical. We all like sweet eatables and drinks, but processed and refined sugar, as well as sweets and candies must be avoided. Over consumption of sweetness can bring a lot of bitterness in our lives. For example, obesity, diabetes, heart diseases, blindness, etc. We must therefore, be very careful with our intake of salt and sugar. Both of them are dangerous chemicals. Indeed, they are silent killers; they wreak havoc in the body, insidiously.

Devitalized junk foods enhance the formation of undesirable and destructive free radicals in the body. By the way, these days we have plenty of sweet junk so-called ‘foods’ – fried doughnuts, salty and spicy chips, chips soaked in oil, candy bars, sodas, fizzy drinks – in the market. So, one should beware of them. They look attractive, but are far from healthy. For example, soda is linked to weaker bones, tooth decay and caffeine addiction. So the hook remains hidden in the enticing bait.

So whatever we consume, we must be mindful of the consequences. We might be impelled by the desire to overeat tasty foods, but by trying to consume beyond measure, we will ourselves get eventually consumed in the process. Even the elixir of immortality, in excessive amount, can become harmful. Thus, a cause of pleasure can also be a cause of suffering: to avoid health problems, it is better to eat wisely.

So the key to everything is: awareness. Whatever we consume or bring in our lives, must be in awareness. With a healthy eating habit, we can contemplate to live healthier. Great eaters do not live better; instead, they get consumed faster.

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