

Myths you shouldn't believe about hair loss in women

Every woman dreams to have beautiful, long and lustrous hair; but hair fall is a highly prevalent problem in the present society. Hair loss is often considered to be gender-biased; however, it is one of the major problems irrespective of gender, which needs immediate attention. Here are some myths need to be shattered.

Myth: Hair gone due to hormonal change will never come back

Truth: Hair will grow again with proper diet if there is no other serious medical problem

Hair fall could be either permanent or temporary. Pregnant and lactating women have high chance of hair loss. This could be attributable to ruffled hormonal levels because of gestation, and child birth. This is reversible with the normality in the hormone levels that is achieved with healthy diet and some medications post-delivery.

Myth: Exposure to sunlight will result in hair loss

Truth: Over exposure could be harmful, but in moderation it is alright

This is a baseless blame on our friendly sun, when there are countless valid reasons for this problem. Up to some extent, UV radiations can be harmful for your hair and body, but only if you spend unusual amount of time exposing your hair to sunlight. This unlimited exposure could affect the hair quality, making it more fragile and lustreless. However, this problem could be solved with a well-nourished shampoo, hair oil, or a moisture-rich spa under extreme conditions. If your job requires you to be exposed to sun for longer hours, it is always essential to protect hair by covering with a scarf.

Myth: Skin with blocked pores

Truth: Blocked pores are responsible for acne but not hair loss.

Hair loss has nothing to do with your skin pores whether blocked or open. Yes, clogged pores are responsible for acne, but hair loss is due to unhygienic conditions, nutrition deficiency or a prolonged disease. Proper care of the scalp, couple with a nutritional diet and high-quality hair care products, can help regain lost hair.

Myth: Covering head leads to blockage of oxygen intake

Truth: Hair does not breathe, but gains nutrients and oxygen from follicles

Some people believe that covering hair with caps, hats, turbans or scarves can result in hair loss due to blockage of air supply to the roots of the hair. There is a notion that excessive sweating weakens roots and leads to hair loss. However, this is not true since hair consumes oxygen and nutrients through hair follicles.

Myth: Maternal genes

Truth: Only dominant genes can steer your hair health

Hair loss has nothing to do with maternal genes only, but it could also be associated with paternal genes. The resulting condition depends only on the genetic dominancy, which defines the physical and internal features of a child's hair. There is a 50-50 chance that the resulting genes could be either maternal or paternal.

Myth: Stress leads to hair loss

Truth: Stress speeds hair loss, already happening due to other reasons.

Stress, which could have associated with either physical or mental fatigue, is not good for overall health. Given that a lack of adequate sleep and unhealthy diets are more common due to personal and professional reasons, hair loss is partly associated with these habits. Human body is programmed to a recoverable loss of 50 to 100 strands per day; however, anything unusual would be a matter of concern.

Myth: Frequent Shampooing can lead to hair loss

Truth: Washing your head keeps your scalp clean, so it is good for hair

Most people believe that frequent shampooing may loosen hair roots, and eventually lead to hair loss. However, it is a fact that regular shampooing will help clean dirt and dandruff from the scalp and help maintain healthy hair.

Meanwhile, it is required to ensure that mild shampoo with more of natural ingredients is used.

Statistics report that some of the major causes for hair loss among Indian women are the medical issue such as PCOS, anaemia, menopause and protein deficiency among others. Meanwhile, nurturing myths may divert one's focus away from the core problem. Hence, it is essential to identify the actual reason behind hair loss and consult the doctor for suitable treatment at an early stage.

Adult Vaccination

Vaccines are available not just for children but for adults as well. However, in India, only around 10% of adults are found to be opting for vaccination as a preventive measure for common vaccine-preventable conditions. This situation can be attributed to not having a national policy for adult vaccination in India, coupled with a lack of public awareness regarding the availability of vaccines. Moreover, several concerns have been raised to include vaccination as part of routine medical care for adults, to promote adult vaccinations.

The need for Vaccination Certain illnesses that can be prevented from attacking the human body with the help of vaccines are called vaccine-preventable diseases. In certain preventable diseases, immunisation will prepare the immune system to counter the disease effectively at the onset of an infection. Vaccination can induce immunity in a person once he/she is given adequate number of doses within a specified timeframe. Further, if vaccinated individuals are exposed to a virus, then they can either escape from being infected or prevent the infection from causing an illness.

Availability of Adult Vaccines in India the government of India has approved all adult vaccines, except the vaccine against human papillomavirus (HPV) that protects against cervical cancer. In India, vaccines are available for adults aged 19 years and above to prevent some common illnesses such as influenza (flu), pneumococcal disease, herpes zoster (shingles), human papillomavirus (HPV), pertussis (whooping cough), hepatitis A and hepatitis B. Other less common diseases such as measles, mumps, rubella (German measles); tetanus (lockjaw), diphtheria and varicella (chickenpox) are also prevented using vaccination.

Disease	Vaccine	Recommendations
Influenza (flu)	Annual influenza vaccine	Once per year
Pertussis/Tetanus	Tetanus, diphtheria, pertussis (Tdap) or Tetanus, diphtheria (Td) vaccine	Tdap – Once dose recommended at the age of 11-12 years. Td – Once in 10 years.
Varicella	Varicella (chickenpox) vaccine	Two doses (unless had a history of varicella/ immunized during childhood or adolescence)
Human papillomavirus (HPV)	HPV vaccine	Three doses before attaining the age of 26 years. (unless already immunized as an adolescent)
Herpes zoster/Shingles	Zoster vaccine	A single dose for adults aged 60 years or older.
Measles/Mumps/Rubella	Measles, mumps, rubella (MMR)	One or two doses (unless immunized previously/ had documented infection earlier/ born prior to 1957)
Pneumococcal disease	Pneumococcal vaccine	All adults aged above 65 years High-risk individuals, with certain chronic illnesses and other conditions.
Hepatitis A virus (HBV) infection	Hepatitis A	Two doses Recommended for certain high-risk individuals. (unless immunized previously)

Hepatitis B virus (HBV) infection	Hepatitis B	Three doses Recommended for certain high-risk individuals. (unless immunized previously)
Haemophilus influenzae Type b infections	Haemophilus influenzae Type b (Hib) vaccine	One - three doses Recommended for certain high-risk individuals. (unless immunized previously)
Typhoid	Typhoid vaccine	One dose in every three years

To conclude, vaccination is a widely available cost-effective option for effective disease prevention, and helps protect and promote public health. Hence, adult vaccination must be promoted as a measure to complement the effect of infant and childhood vaccines, to contribute to enhanced medical care. Moreover, vaccination contributes to 'herd' immunity, and helps prevent infectious disease outbreaks within a community/city.

Source: [Medicine Net](#)

Anaemia

Prevalence of Anaemia in India

In India anaemia is prevalent among 59% women, with 72.12% from the Eastern regions and 45% from the Western regions being affected by the condition. Anaemia is a condition that is characterised by a lack of adequate levels of Red Blood Cells (RBCs) or haemoglobin in blood, resulting in reduced amount of oxygen carried through the bloodstream.

Anaemia is a major cause of maternal mortality among women and low birth weight among infants. Anaemia accounts for 20-30% of maternal deaths in India, which contributes to 50% of anaemia-associated maternal deaths globally. Moreover, the condition is also associated with increased susceptibility to infections, physical fatigue, poor concentration, paler complexion, and dry nails.

Causes of Anaemia

There are more than 400 causes of anaemia, out of which iron deficiency is the most common cause. Basically, decreased/faulty production or destruction of RBCs are the most likely causes of anaemia. Moreover, some other causes of this condition are as follows:

- Vitamin deficiency: Lack of adequate levels of Folic acid (folate) and vitamin B12 in daily food intake could result in Folic Acid Deficiency Anaemia and Vitamin B12 Deficiency and Pernicious Anaemia.
- Haematological disorders: Certain diseases caused due to deficiency in red blood cells, such as thalassaemia and sickle cell anaemia, are responsible for haemolytic anaemia.
- Inflammatory conditions such as Crohn's disease and intake of certain medicines that result in low levels of folic acid are also some of the causes behind anaemic conditions.
- Among women, heavy bleeding during menstrual periods that leads of iron deficiency, eventually leads to anaemia.
- Rheumatoid arthritis, chronic kidney disease and leukaemia are some of the possible causes of anaemia.

Anaemia Diagnosis Complete blood count is the ideal diagnostic test for anaemia detection. Blood count determines the number of RBCs per millilitre (ml), and haemoglobin levels, as well as size of RBCs. Later, they are compared with the pre-defined threshold levels that are based on the participant's age and gender.

Anaemia Treatment Based on preliminary diagnosis, anaemic patients are prescribed medications that help tackle iron deficiency. However, advanced treatment options may be needed based on the type of anaemia detected. The goal of any anaemia treatment is to increase the amount of oxygen in bloodstream. Other standard interventions for tackling anaemia are as follows:

- Dietary changes to include foods that are rich in iron, vitamin B12, vitamin C and folic acid, and those.
- Medications to treat heavy blood loss among menstruating women.
- Antibiotics to treat anaemia-associated infections.
- Chelation therapy to treat lead poisoning among children with iron-deficiency anaemia.
- Blood transfusion in case of severe anaemic conditions.
- Bone marrow stem cell transplant to replace faulty stem cells that are the underlying cause of anaemia.

Anaemia is the most common disorder that is prevalent among 25% of the global population, and is more common among females than males, and in children, during pregnancy and among older populations. The disorder is not only a health burden but also an economic burden given that it affects a person's productivity at workplace.

Fitness and Cardiac Health

Importance of cardiac health has come into focus in India over the past few years, with the rising cardiovascular diseases, and its associated complications. It is estimated that nearly 30% and 15% of urban and rural population in India, suffer from high blood pressure and heart attacks, while 2.4 million Indians die due to heart disease every year. Meanwhile, annual incidence of heart failure due to coronary and rheumatic heart disease, hypertension, obesity and diabetes in India is between 491,600 and 1.8 million. Such alarming statistics also indicate that cardiovascular diseases have replaced communicable diseases as the leading cause of death in India.

Cardiovascular risks and associated complications Cardiovascular risk factors are basically associated with complications such as coronary heart disease and stroke. Risk factors do not guarantee the development of cardiovascular conditions, but indicate the likelihood of developing a heart-related disease at any point, in the lifetime of an individual. Hence, it is the need of the hour to manage risk factors and prevent them from compromising cardiac health.

Risk factors are divided into two types - Modifiable and Non-modifiable. While some of the hereditary risk factors result from family history, ethnicity and age; other lifestyle-related risks are a result of tobacco usage, alcohol consumption, hypertension, bad cholesterol, obesity, physical inactivity, diabetes and unhealthy dietary habits. Genetic or Hereditary (non-modifiable) risk factors cannot be treated easily, but lifestyle-associated (modifiable) risk factors can be changed and treated, in the process of effective management of cardiac health.

Cardiac Health among newly diagnosed patients Patients with newly diagnosed heart disease need to be extra cautious about their cardiac health. Fitness programmes for patients diagnosed with heart disease focus on better heart function such as improved pumping ability of the heart, and to increase the diameter of the coronary vessels that supply oxygen to the heart muscle.

Benefits of Physical Fitness to maintain cardiac health Fitness is not just about maintaining the right body weight, but also physical and mental strength. A major factor that contributes to high risk of cardiovascular conditions and its associated complications is found to be 'sedentary lifestyle', coupled with other factors such as high blood pressure, smoking, alcohol consumption and obesity among others. Hence, doctors and other health experts advocate the importance of physical fitness and daily exercise to prevent/reduce the risk of heart diseases, and the recurrence of cardiovascular events such as heart attacks.

Some of the benefits of regular exercise on good cardiac health are:

- High physical strength and less fatigue
- Reduced in body weight and BMI
- Adequate blood pressure
- Reduced bad cholesterol (LDL) levels
- Increased good (HDL) cholesterol levels
- Better insulin sensitivity
- Improved muscular function
- Enhanced oxygen intake
- Stable hormone levels
- Improved bone health

Exercise and healthier diets have proven to result in better clinical outcomes, and improvement in the quality of life of such individuals; while the death rates among patients who involved into regular physical activity have reduced by 20-25%. Moreover, they are the best options to prevent or manage cardiovascular diseases, and will result in long-term benefits to individuals' cardiac and overall health.

National Nutrition Week

National Nutrition Week (NNW) is observed from 1st to 7th of September in India, during which public awareness campaigns are held to encourage healthy diet and nutrition. The national campaign was first launched in 1982 as a central government initiative aimed at encouraging healthy dietary habits among the children and women especially lactating mothers. The campaign also aims to address health issues associated with nutrition such as undernutrition and overnutrition.

What is Overnutrition?

“Overnutrition can be defined as overconsumption of nutrients and food to the point at which health is adversely affected. It results in obesity, which increases the risk of serious health conditions such as cardiovascular diseases, hypertension, cancer and type-2 diabetes.”

Overnutrition can be either general or specific; general overnutrition is the intake of excessive amounts of food of any or all types; while specific overnutrition is the excess of a single nutrient (vitamin or mineral).

A major health issue affecting the middle and high-income regions of the country is overnutrition. It was found that people living in poverty experience diseases that result from a lack of healthy food, while wealthy individuals are found to suffer from diseases that are a result of an abundance of food resources.

Undernutrition

- India is amongst the list of nations that are victims of a global health burden called malnutrition and its associated complications such as loss of productivity and economic burden on the society.
- 40% of the total malnourished children aged under five years are living in India.
- One out of every three malnourished children across the globe is from India.
- In India malnutrition results in financial losses worth INR 1.3 lakh crores, which is approximately 4% of the national GDP.
- India ranks fifth amongst the countries with poor commitments towards global malnutrition eradication goals.

Overnutrition

- By 2020, an estimated two-thirds of the overall global disease burden will be a result of chronic non-communicable diseases, most of which are associated with diet.
- Morbid obesity is affecting 5% of the India's population.
- In India, income inequality is a major cause of both overnutrition and undernutrition.
- With each rise in standard deviation in income inequality, there is 19% and 21% increase in the likelihood of being underweight and overweight respectively.

Impact of Overnutrition on human health

- High sugar and fat levels in the body affects the appetite control and metabolism, and results in several health conditions such as cancer, heart diseases, type 2 diabetes, hormonal disorders, and early menopause.
- Obesity is mainly caused due to a lack of physical activity, and high intake of refined foods and fats, which is not compatible with the human cardiovascular system.
- Obesity increases the risk of complications during surgery, pregnancy and childbirth.
- Obese women are more prone to menstrual irregularities and infertility, because of impaired glucose tolerance and in many cases, hyper-glycaemia leads to diabetes.

- Children born to mothers who are overweight or obese during pregnancy are found to be at high risk of becoming obese in later life.

Interventions for Overnutrition

The World Health Organisation (WHO) has formulated a 'Global Strategy on Diet, Physical Activity and Health' that outlines the measures to be taken to combat overnutrition on a global scale. The overall goal of the global strategy is to promote and protect public health by creating a sustainable environment that facilitates healthy nutrition habits at individual, community, national and global levels. They are expected to result in reduced disease and death rates associated with unhealthy diet and physical inactivity.

Hepatitis

World Hepatitis Day, which is one of the eight official global public health campaigns of the WHO, is observed on the July 28 every year. The WHO and World Hepatitis Alliance announced that the campaign theme for World Hepatitis Day 2015 will be the prevention of viral hepatitis, which causes 1.4 million preventable deaths per annum globally. The annual campaign aims to raise awareness among the public and infected patients, as well as promote improved access to hepatitis services, particularly prevention interventions, by policymakers.

Introduction to Hepatitis and disease subtypes Hepatitis is a condition affecting the liver, and is characterised by inflammation of the liver cells. The condition is mainly caused due to Hepatitis virus, alongside other factors such as alcohol, drugs and other autoimmune diseases. There are five major types of Hepatitis - A, B, C, D and E. In India, a silent epidemic of Hepatitis B, D and C infections is a major health threat. Hepatitis B alone is responsible for 100,000 annual deaths and nearly one million Indians are at risk of this infection. Hepatitis C is prevalent among 1% of the country's population, while Hepatitis D is observed only among 10-20% of HBV-positive patients.

Causes and Symptoms of Hepatitis

- **Hepatitis A:** This condition is caused due to contaminated food & water, infected by Hepatitis A virus (HAV). The disease is not chronic and can be treated with medications to achieve complete recovery.
- **Hepatitis B:** This condition is an STD (sexually transmitted disease), which is caused due to Hepatitis B virus (HBV). This is a communicable disease, and spreads due to contact with infected blood, semen, and other body fluids. Hepatitis B causes severe liver damage due to inflammation, and may eventually result in liver cancer. Other causes are unprotected sex or contact with blood of an infected person, skin perforation with unsterilized needles. It also affects infants through infected mother's milk.
- **Hepatitis C:** This condition is caused Hepatitis C Virus (HCV) and is spread through direct contact with the blood of an infected person. The condition is symptomatic of liver swelling and damage. It leads to liver cancer only among people with cirrhosis, which is common among 20% Hepatitis C patients.
- **Hepatitis D:** This condition occurs among people who are already infected with Hepatitis B. It is caused by Hepatitis D virus (HDV). HDV infection spreads through infected blood, unprotected sex, and perforation of the skin with infected needles. Swelling of the liver is observed among Hepatitis D patients.
- **Hepatitis E:** This condition is caused due to consumption of water that is infected by Hepatitis E virus (HEV). Liver swelling is also observed, but the condition is not chronic. Anal-oral sex may also result in Hepatitis E infection.
- **Hepatitis X:** When preliminary diagnosis does not detect the cause of Hepatitis infection, then it is termed as Hepatitis X, which is caused due to unknown virus.
- **Hepatitis G:** This condition, which is caused due to Hepatitis G virus (HGV), results in mild or no symptoms.

Some Prevention methods:

- Hepatitis A: Personal hygiene, clean food & water, and vaccination.
- Hepatitis B: Safe sex, use of clean syringes & sterilized skin perforating equipment, and vaccination.
- Hepatitis C: Low alcohol consumption, non-sharing of drug equipment and personal hygiene tools.
- Hepatitis D: Same as Hepatitis B.
- Hepatitis E: Same as Hepatitis A.

Diagnosis and Treatment of Hepatitis Hepatitis infections are diagnosed based on symptoms, a physical exam, and blood tests. Advanced tests include sonogram, CAT scan and liver biopsy. Treatment for Hepatitis is provided by a hepatologist or gastroenterologist. It includes antiviral drug therapy, and is completely based on the type of infection, and stage of the disease. There is no treatment for Hepatitis A, D or E infections, while Hepatitis B infections are treated with protein & carbohydrate-rich diet. Hepatitis C is treated using vitamin B12 supplements and interferon-free therapies that are 80-95% effective.

Metabolic Syndrome

Obesity among adults and children is a highly-prevalent condition and a rapidly growing public health burden in India over the past two decades, given the unhealthy lifestyle and food choices. Currently, one-third of the country's population, especially women, are known to be affected by a chronic condition called Metabolic Syndrome (MS).

Metabolic Syndrome is a cluster of several interrelated cardiometabolic risk factors. The condition is characterised by elevated blood pressure, impaired glucose tolerance, central obesity, insulin resistance or prediabetes, coupled with decreased fasting serum HDL cholesterol and elevated fasting serum triglyceride levels.

The condition is backed with a two-fold and a five-fold risk of cerebrovascular disease (CVD) and type 2 diabetes respectively. MS patients are 30-40% more likely to develop diabetes and/or CVD within 20 years. While a lack of compliance with lifestyle and diet changes is the main cause of MS, experts suggest that increased physical activity and intake of healthy and low-calorie diet may help prevent MS.

Causes of Metabolic Syndrome: While MS is partly attributable to patients' genetic background, there are also certain preventable environmental causes. Physical factors such as age, stress, diet, less physical activity, disrupted or inadequate sleep, excessive use alcohol and tobacco, and mental illness are also known to cause MS.

MS is associated with central obesity that is characterised by visceral and/or ectopic fat, coupled with mismatch between the energy demand and energy provision via food that leads to a metabolic abnormality called insulin resistance. Meanwhile, ectopic fat is a condition where fat is stored in organs that are not designed for fat-storage purpose.

Diagnosis of Metabolic Syndrome: The US National Institute of Health (NIH) guidelines suggest that positive diagnosis for three or more traits among the following indicates the incidence of metabolic syndrome in an individual. They include:

- Waist circumference (at least 35" for women and 40" for men)
- Triglyceride level (150 mg per decilitre or 1.7 millimoles per litre)
- HDL cholesterol (less than 40 mg/dL in men and 50 mg/dL in women)
- Blood pressure (at least 130/85 mmHg)
- Fasting blood sugar (at least 100 mg/dL)

Available treatment options for Metabolic Syndrome: The condition being mainly associated with unhealthy lifestyles, effort to adopt healthier lifestyle and diet changes for a period of three to six months is the first-line treatment prescribed for patients diagnosed with Metabolic Syndrome. Moving forward, treatment with drugs constitutes separate treatment for associated morbidities (or individual conditions). Treatment includes diuretics and ACE inhibitors for hypertension; drugs to reduce cholesterol, diabetes and cardiovascular conditions; weight loss medications, alongside physical activity and dietary modifications.

Disease management Given the fact that Metabolic Syndrome is more of a lifestyle-related condition, better management is basically associated with lifestyle modifications. Experts suggest that consuming a protein-rich, low calorie diet; at least 30 minutes of physical activity, and drug adherence. Since there is no simplified and standard cure for Metabolic Syndrome, could help treat MS.

Conclusion Moreover, clinical studies have found that MS is twice more prevalent among men rather than women, especially those who are aged between 41-60 years are at increased risk of developing MS-associated conditions. Hence, better prevention, coupled with early diagnosis and appropriate interventions are said to play a major role in managing the condition among high-risk populations.

Source: [American Heart Association](#)

National Nutrition Week

National Nutrition Week

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What is Good Nutrition?

Good Nutrition comprises all the essential nutrients from all food groups such as vitamins, minerals, carbohydrates and healthy fats. Nutrients are the food ingredients that contribute to growth and repair of the essential body tissue, as well as physical and mental growth. Since no single food item can provide all the nutrients in the right amount, we combine several foods from different food groups to meet the daily diet needs. Our dietary habits can be regarded healthy only if some basic rules - low fat, plenty of starchy carbohydrates and fibre diet, vitamins, minerals and anti-oxidants, moderate sugar and sweet foods, light amount of salt, and plenty of fluids especially water – are considered.

Good nutrition and Healthy lifestyle

Good nutrition, coupled with a regular physical activity, helps maintain a healthy lifestyle. Maintaining a balanced diet can contribute to human health in several ways, from normal physical growth to preventing some chronic and severe disease attacks. In general, a balanced diet can boost immunity, delays the effect of ageing on physical and mental health, wards off tiredness and fatigue, helps maintain right body weight and BMI, and prevents cardiovascular conditions, some cancers, diabetes, and gallbladder diseases.

Food groups that help maintain a balanced diet

Whole grains

Whole grains are rich in fibre, minerals and vitamins; and unlike refined grains, do not have the bran and the germ removed which makes it healthier than refined grains. Food products that are made up of whole grains include breads, pastas and cereals, while foods and flours include whole wheat, brown rice, bulger, corn, buckwheat, oatmeal (oats), spelt and wild rice.

Fruit and vegetables

Fruit and vegetables comprise high level of vitamins, minerals and fibre content, which are essential for normal bodily functions. We need to consume five portions of fruits and vegetables every day - fresh, frozen or canned, or dried fruit and veggies. Fruits should be consumed raw, or in the form of juices with no external ingredients added. Vegetables are consumed in either raw or cooked forms, but it is always advisable to keep the vegetable portion - high, and oil content - low.

Proteins

Proteins contribute to the growth and repair of the body tissue and should comprise 25% of the daily food intake. Protein-rich foods also include essential minerals, such as iron, magnesium, zinc, as well as B vitamins. Some food that are highly rich in proteins include tofu, meat, poultry, fish, eggs, beans, nuts, soya among others. However, it is always advisable to consume foods that are grilled and roasted or microwave meats and fish, instead of fried food items.

Legumes

Legumes are plants in the pea family that produce pods that slit open naturally along a seam (dehisce), revealing a row of seeds. Excessive consumption of legumes can help maintain glycaemic control among type 2 diabetes patients, and reduce the risk of developing coronary heart disease. Some of the foods from the legume family are soy, peas, peanuts, mesquite, lupines, lentils, clover, carob, and beans.

Dairy

Dairy products include milk, yoghurts, cheese, and some soy products. These are a good source of calcium which is important for healthy bones and teeth. It is always advisable to consume low fat dairy products. People who do not consume animal sourced dairy products can consider broccoli, cabbage and soya milk and yoghurts with added calcium to substitute their calcium intake.

Fats and sugars

There are two basic types of fats - saturated and unsaturated. Consumption of saturated fats should be lowered because excess consumption could increase cardiovascular risks. Cream, margarine and fried foods are high in saturated fats; vegetable oils and oily fish comprise unsaturated fats. Moreover, it is also advisable to decrease the consumption of sugar and fat content in daily diet, given their long-term health consequences.

Impact of unhealthy diet on human health

- High levels of sugar and fat content affects the appetite control and metabolism, and results in several health conditions such as cancer, heart diseases, type 2 diabetes, hormonal disorders, and early menopause.
- Obesity is mainly caused due to a lack of physical activity, and high intake of refined foods and fats, which is not compatible with the human cardiovascular system.
- Obesity increases the risk of complications during surgery, pregnancy and childbirth.
- Obese women are more vulnerable to menstrual irregularities and infertility, because of impaired glucose tolerance and in many cases, hyper-glycaemia leads to diabetes.
- Children born to mothers who are overweight or obese during pregnancy are found to be at high risk of becoming obese in later life.

Reference: [Medical News Today](#)

Effects of Polycystic Ovary Syndrome (PCOS) on female fertility

What is Polycystic Ovary Syndrome (PCOS)

Polycystic Ovary Syndrome (PCOS) is one of the most common hormonal disorders that occur among 5-10% of women of childbearing age. The condition is also known as Polycystic Ovarian Syndrome or Stein-Leventhal Syndrome.

The condition is characterised by irregular or no menstrual periods, ovulation-related infertility, anovulation and excess levels of androgenic hormones and insulin resistance. PCOS is symptomatic of acne, pain in the pelvis region and dark patches at the back of the neck, hair loss from the head and unwanted facial and/or body hair growth (hirsutism). PCOS is also associated with obesity, Type 2 diabetes and high cholesterol levels.

Polycystic Ovarian Disease (PCOD) vs. Polycystic Ovarian Syndrome (PCOS)

PCOD, which results in the formation of immature follicles that accumulate into cysts, does not affect female fertility and can be treated with hormone therapies. Meanwhile, PCOS, which leads to the development of multiple ovarian follicles, is directly related to infertility; since the follicles are immature and doesn't contribute to the development of ovum.

Both the conditions - PCOD and PCOS are associated with ovarian malfunctioning, and other similar symptoms such as irregular periods. Both the conditions are said to result from hormonal imbalance and contribute to infertility, and are treated using hormonal pills and injections. However, the conditions differ in some respects such as PCOS causing thinning of hair and PCOD resulting in the development of male-like hair pattern in females.

What causes PCOS

Although the actual cause of PCOS has not been identified, research till date has conclude that certain conditions such as insulin resistance, hormonal imbalance, genes, as well as exposure to androgens in the womb and levels of bisphenol A in women.

Insulin resistance: Basically, insulin resistance leads to weight gain, which eventually worsens (androgens). Excess male hormones undermine the development of ovarian follicles, which would in turn result in anovulation or irregular ovulation in women.

Hormonal imbalance: There is no scientific proof regarding the evolution of hormonal imbalance among women with PCOS condition. However, research states that either insulin resistance or any abnormalities in parts of the brain that control hormonal production are likely to be responsible for hormonal imbalances. Women with PCOS are found to have abnormal levels of testosterone, SHBG (sex hormone binding globulin), luteinizing hormone (LH), prolactin and anti-Mullerian hormone (AMH).

Genes: PCOS is also believed to be carried in the family through genes. It is designated as a genetic disorder after studies showed that an estimated 50% of sisters and 40% of mothers of patients with PCOS are affected by the condition.

Diagnosis and Treatment of PCOS

PCOS diagnosis is based on the medical history of the patient with respect to menstrual periods, symptoms and weight changes. The condition is diagnosed either with the help of an ultrasound scan of the ovaries or a blood test to determine the levels of hormones and cholesterol.

With the detection of abnormal hormone levels through blood tests, and ovarian cysts in the ultrasound scan, doctors confirm the severity of the condition and provide treatment accordingly.

There are multiple treatment options for PCOS, although none of them have proven to be 100% effective. Some of the most commonly prescribed treatments include:

- **Weight loss:** Losing excess weight is said to be directly associated with reduced cholesterol levels, and eventually insulin loss and lower testosterone and improved ovulation and increased chances of fertility.
- **Medications:** Diabetes drugs, oral contraceptive pills and anti-male hormone medications are the most commonly prescribed drugs for PCOS. Although these drugs are not completely effective against PCOS, they are used to prevent the PCOS-related complications such as insulin resistance, excess male hormones, and irregular menstrual periods.
- **Surgery:** Multiple ovarian cysts are treated using laparoscopic ovarian drilling (LOD), surgery that involves destruction of the tissue that produces androgens. LOD lowers the levels of luteinising hormone (LH) and testosterone, and raise the follicle-stimulating hormone (FSH) levels.

Overall, PCOS is not only a medical condition among women of reproductive age but is also found to lead to psychiatric problems such as anxiety, depression and eating disorders that could impact the self-esteem of women suffering from this condition.

Orthorexia

Understanding Orthorexia

Orthorexia is defined as an obsession among humans to eat proper foods. This term does not refer to the condition where you are following a healthy diet to benefit your health, recover from a weakness after a prolonged disease, or manage your weight. The condition arises from a self-imposed restriction on food to stay fit and healthy; and sticking to a kind or quality of food to gain physical fitness without following any strict exercise regime. Orthorexia arises when a person's dietary habits cross all limits in restricting what to eat, and resulting in an obsession about the intake of vitamins, proteins, carbohydrates in daily diet. People suffering from this condition are highly anxious about the types of food they eat and shown signs of guilt if they fail to do so.

Symptoms of Orthorexia Some of the most commonly observed signs of orthorexia that need immediate medical attention are as follows:

- Spending too much time in analysing the health value of a food item.
- Preaching about healthy diet and avoiding socialising with people who don't agree with their dietary choices.
- Devoting too much time in planning daily diet intake.
- Obsessed with healthy diet and physical fitness.
- Eating very limited types and number of food items with a strict self-imposition.
- Punishing themselves for not being able to follow a stringent diet.
- Following a rigorous exercise regimen.

Treatment of Orthorexia

Orthorexia is not accepted as a formal medical illness but as a behavioural problem just like Obsessive-compulsive disorder (OCD). Hence, no specific treatment is available except proper guidance from doctors, dieticians and psychologists. People suffering from Orthorexia need to be treated to overcome the obsession. Some of the most common treatment options include consulting diet specialists who recognize this kind of eating disorders, and guide the patient to reach out to the concerned health professional based on the kind of complications that arise from orthorexia.

Patients should be counselled, and made aware of the associated consequences of a low weight and failing health, and should be inspired to gain a healthy weight. Given the fact that orthorexia is a behavioural problem rather than a physical issue, it is always advisable to meet a behavioural expert to recognize the root causes and behavioural issues for such extreme state.

Prevention of Orthorexia

Orthorexia can be recognised with a drastic change in eating patterns, and can be prevented by avoiding oneself from reaching a level of obsession in achieving fitness and diet goals. It is always advisable to consult a dietician or nutritionist before cutting down on any food item from the daily diet overall. It is best to not avoid any specific food overall, but foods that are healthy, but still contribute to weight gain, should be taken in moderation since a human body needs all kinds of nutrients in moderate levels. People who are possibly suffering from orthorexia must learn to balance health and pleasure foods.

Orthorexia is often a result of high restriction on oneself in terms of dietary habits, and to follow a diet to maintain a strict and healthy eating pattern. However, when this habit turns into an obsession, it might need therapeutic treatment. Human body is a wonderful machine which derives whatever it needs from the food you eat. Hence, it is always advisable to ensure that we do not impose any self-obligatory deprivation on the food that we eat.

Understanding Seasonal Flu, and Ways to Get Away from Infection!

It's the flu (influenza) season of the year. The cold weather, and frequent monsoons, make it the right time for children and the adults to catch cold and other unpleasant infections.

What is Seasonal Flu?

Seasonal influenza (flu) infections are caused by influenza viruses, and infect the respiratory tract (i.e., the nose, throat, lungs). Unlike many other viral respiratory infections, such as the common cold, the flu causes severe illness and life-threatening complications in people, mainly during the colder seasons of the year.

How do I know I am infected?

It is essential to understand and watch out for the major symptoms of Seasonal Flu, and get immediate medical attention in case the symptoms last longer than a week and get worse rather than better.

- Shortness of breath
- Difficulty in breathing/swallowing
- Chest pain
- Coughing of coloured sputum
- Severe or persistent vomiting
- Fever and Chills
- Fatigue
- Body aches
- Sore throat
- Headache
- Rhinorrhoea (runny nose)
- Ocular symptoms (e.g., eye pain and sensitivity to light)

Not all the symptoms are observed in a single patient. Symptoms vary based on the level of infection, which ranges from mild to severe illness, and at times could lead to death.

How do I catch an infection?

The most common mode of transmission of viral infections is direct contact with the person's bodily fluids, such as respiratory droplets emitted when a person coughs, sneezes, talks or yawns. This could be avoided by staying away from people who are infected, and washing hands often with soap and water, or an alcohol-based liquid hand wash.

How to diagnose an infection?

Ideally, the first step in the diagnosis of viral infections is a blood test, called a Complete Blood Count (CBC) test used to differentiate between the causative organisms, which is either a bacterium or a virus. Ideally, blood tests do not detect viral infections, but are only prescribed to rule out other possible causes of infections.

How can I prevent an infection?

Flu vaccines are made available during influenza season every year, and provided at affordable prices at healthcare facilities in the country. The vaccine, which costs as less as INR 500, is administered annually, and could reduce the risk of contracting flu infection by 50-60%. Vaccination helps prevent infection, and in some cases, even if the person gets infected, vaccination reduces the severity of symptoms, and the need for antibiotics.

What if I am infected with flu?

If a person is diagnosed with a flu infection, it is good to ensure adherence to prescribed treatment regimen. Meanwhile, there are certain ways to manage the flu-associated complications, such as:

- Consume lots of fluids, like water and coconut juice to remain hydrated.
- Steam inhalations with menthol, salt water, nasal sprays or drops help reduce congestion in nose and throat.
- Hot drinks/soups and chewable tablets or lozenges that contain menthol or eucalyptus can help soothe the throat.
- Salt water gargling could help ease sore throat.

In India alone, seasonal flu has recorded more than 23,000 cases and resulted in the death of over 1,200 people during the 2014-15 flu season. Hence, it is important to understand the seasonal flu infections and know the various ways to prevent, and manage infections.

Source: [Indian Express](#)

Viral Fever

Viral fever is an acute viral infection that is characterised by a range of conditions, usually elevated body temperature. Unlike bacterial infections, viral infections target specific organs, and patients are treated based on the external symptoms. Some viral infections are found to be dangerous and life-threatening; while some are easily cured within a week of infection with the intake of appropriate medicines. Viral infections are common in children and adults with low immunity levels, especially those suffering from respiratory problems such as asthma. Further, viral fever is contagious and is easily transmitted from one person to another through bodily fluids.

Symptoms and Causes

The most common cause of viral infection is direct contact with the person's bodily fluids, such as saliva that is emitted when a person coughs, sneezes or yawns. The tiny particles of fluid that are emitted during any one of these actions can easily transmit infections from one person to another since these particles contain bacteria or viruses that are present in a person's body.

Once a person is infected, it takes nearly 10-15 days for a viral infection to emerge into a fully blown viral fever. This is the incubation period during which the virus multiplies to a level that could cause an infection, which is later followed by elevated body temperature, fatigue, body and muscle aches and eventually, high fever. Some of the common symptoms of viral fever are as follows.

- Intermittent fever that occurs at regular intervals
- Doesn't subside with medicines or antibiotics.
- Persistent for a longer duration
- Patient feels too cold (or) chills
- Severe pain around the joints and muscles
- Vomiting and Diarrhoea
- Swelling of the face and hands
- Skin Rashes
- Severe Fatigue
- Sore throat and cold

Diagnosis

Ideally, the first step in the diagnosis of viral infections is a blood test, called a Complete Blood Count (CBC) test which is prescribed in case the doctor wants to differentiate between the causative organisms, which is either a bacterium or a virus. Since, blood tests do not detect viral infections, these are prescribed as a measure to rule out other possible causes of fever such as dengue, malaria, chikungunya and typhoid among others.

Treatment

Based on the results of the diagnostic tests, viral infections are treated with antipyretic and analgesic drugs. Patients are advised to consume lot of fluids, and those who are suffering from vomiting and diarrhoea are advised to take Oral Rehydration Solution (ORS) to regain lost nutrients. Moreover, patients should take adequate rest, in well-ventilated rooms with dry and clean environment, with access to sunlight. Moreover, changing patients' bedsheet at least once a day during the treatment is also advisable to prevent infections.

Prevention

Viral infections cannot be directly prevented since they are seasonal and mostly occur during winter seasons. However, maintaining adequate immunity levels could help avert infections up to some extent. Keeping the home

dry and clean, and spending some time in fresh air and sunlight during the day can help prevent several infection-causing germs from attacking the immune system. Younger children and older population need to be extra-cautious about viral infections, given their low immunity levels. Moreover, caretakers of infected patients are advised to wash hands before and after touching the patient, to prevent infection from spreading to other people.

Home Remedies for Viral Fever

Some simple home remedies that can help prevent viral infections are mentioned below. Some of them can also be used during an early viral infection to lessen the symptoms of the infection.

- It is always advisable to consume lots of fluids, like water and coconut juice. Milk can be avoided or taken only once a day in small portion.
- Patients suffering from diarrhoea should avoid fruit juices, salad or raw food.
- Consuming the mixture of honey, fresh lemon juice and ginger juice twice or thrice a day can help boost immunity.
- Mixture of basil leaves juice, ginger juice and honey can also help treat symptoms like cough and cold during a viral fever.
- Sore throat can be treated by gargling with a glass of lukewarm water added with little salt.
- Chewing raw basil leaf can provide relief from cough.
- Tea, mixed with a pinch of black pepper powder, can help treat diarrhoea in children.
- Warm orange juice helps get rid of body toxins and gives instant energy.
- Avoid outside food during fever, and prefer home food, cooked without spices.

Please note that the above-mentioned home remedies do not treat viral infections, but provide relief from the symptoms associated with viral infections. If the fever doesn't subside after a week of using medication, then it is always advisable to meet the doctor to change the treatment regimen.

Why Good Health Is Awesome, but not a Panacea!

We all know good health is a key to some of the most important things in life. It may not provide all the happiness but how it positively affects a person's life needs no explanation. Considering the high prevalence of lifestyle-related diseases in the present generation, maintaining moderate blood sugar levels, correct BMI and body weight, adopting healthy dietary habits, as well as self-regulated or no drinking and smoking habits is undoubtedly the need of the hour.

Why Good health is essential?

A healthy person is more productive and efficient, and has more time, money and energy when compared to an unhealthy person. Great health matters; hence, the time and efforts needed to achieve good health are worth it. Most people who are striving to lose weight are not sure of what comprises good health, as well as the various ways to achieve it. In the current generation, our vision about health has narrowed to the size of our skin. However, it is important to focus on staying physically fit instead of fretting over external physical appearance.

Major factors that help gain good health include increased physical activity, nutritious diet as well as adequate financial security, and good social inclusion. This eventually leads to enhanced disease prevention and reduced risk of factors that are associated with the both mental and physical health.

- Good health contributes to great physical fitness, and eventually low illness rate, which means a major proportion of medical expenses are saved.
- Physical fitness also results in higher levels of energy and enthusiasm, while preventing fatigue and laziness. It also results in emotional resilience and a better social life.
- Good health also contributes to moderated levels of hormones in the body, and eventually helps prevent diseases that are related to hormonal imbalances, which are quite common among women.
- Physical fitness makes a person feel good about oneself, which radiates a great level of positive energy in both personal, professional life and relationships.
- Maintaining a balanced lifestyle also helps gain better sleep and improve immunity levels in the body, which helps prevent a lot of diseases.
- Physical exercise is a major factor that contributes to good health. Exercise helps improve blood circulation, bone strength, strength and stamina, as well as helps relieve stress.
- Good health also contributes to improved sexual health and well-being.

Why Good Health is not a solution?

Given the fact that good health comprises physical, mental and social health, which are co-related to each other, it is important to note that losing a few pounds is not just enough. Achieving physical health is not the only solution for each problem in our lives. Meanwhile, stress results in losing control of the mind and body, and how we deal with the day to day pressures in life.

Moreover, a healthy body doesn't replace a person's unhealthy habits, bad memories and past experiences all at once. Habits such as comparing oneself with friends, family or anybody around us, which eventually leads to the fear of rejection remain. Despite the benefits of healthy body, good health doesn't result in any significant changes to a person's fortune. Hence, it is essential to make sure that achieving physical fitness is coupled with gaining mental peace and eventually leading a positive life, with optimistic thoughts and some social responsibility.

World Osteoporosis Day

The World Osteoporosis Day is observed on the 20th of October each year, with an aim to spread public awareness on osteoporosis, its prevention and cure. India being the second-most populous country, is home to a large number osteoporotic patient. It is estimated that 20% of women and 15% of men in India are suffering from osteoporosis by 2015.

Osteoporosis is a condition that occurs due to low calcium content in bones and ageing. It results in fragile bones that are prone to fractures, and lower bone density which is responsible for brittle bones. It is a silent disease that is detected only when a fracture occurs. It is more common among post-menopausal women and the older population. Bones are complex tissues in which bone density is maintained with the right balance between the rate of resorption and the formation of new bone cells. Early signs of osteoporosis are termed by a condition called osteopenia, in which the bone mineral density is lower than normal. The condition, if untreated leads to osteoporosis, in which the rate of resorption of cells is exceeded by the rate of formation of new cells, hence decreasing bone density.

The exact reason for osteoporosis is unknown; however, many factors are responsible for the development of osteoporosis in the body. Some of them are as follows:

- Alcohol consumption.
- Smoking.
- Vitamin D deficiency.
- Physical inactivity.
- Hyperparathyroidism
- Menopause.

Symptoms

- Osteoporosis is a silent and most common disease of bones, which lacks specific symptoms. Some of the widely observed symptoms of osteoporosis are as follows:
- Fractures, mostly occurring at the back or the hip regions, indicates osteoporosis.
- Dowager's hump in spine, which appears with growing age or a painful fracture, is another sign to detect osteoporosis.
- Gradual loss of height and stoop posture.
- Dental X-Rays showing bone loss in jaws.
- Backache which can be from moderate to severe.

Diagnosis and Treatment The most common test for diagnosing osteoporosis is Bone Mineral Density Test (BMD), which is performed using more advanced techniques. The most common BMD test is DXA (Dual energy X-Ray Absorptiometry), which is a low-radiation test that can determine the slightest loss of bone density and evaluate overall bone density. BMD test scores are used to diagnose the level of osteoporosis, when the BMD score is equal to, or above, 2.5. Meanwhile, a BMD test score ranging from 1 to 2.5 indicates osteopenia. Moreover, other diagnostic tests for osteoporosis include Ultrasound and QCT (Quantitative Computer Radiography).

Treatment Treatments for osteoporosis depends on the condition of the patient. Meanwhile, drug interventions aim at preventing bone loss, thereby reducing the risk of fractures. Changes in diet and lifestyle also play a major role in reducing the disease-associated complications. Some of the most commonly prescribed interventions include:

- Medications: Antiresorptive therapies are prescribed for osteoporosis patients to restore bone density.
- Increased weight bearing exercises help gain bone weight.
- Reduce, or cease, the use of tobacco.
- Anabolic agents, such as parathyroid hormones, which reverse the negative skeletal balance.
- Regular exercise that involves walking and jogging or any other activity helps maintain bone health and prevent osteoporosis.