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DEAR READERS,

Greetings from Reliance General Insurance!

increasingly accepted part of our modern world. However,

Vitamin D & B12 deficits together? Let's understand & read

Warm regards,

offbeat destinations in India to escape the hustle-bustle of

contemplate & consider the other side of the coin.



What's NSIDE?

05 Testimonial

06 Did You know

· Changing Climate Changes Health

08 Health Guide

• Controlling the Global Thermostat

· The Influence of Soil on Human Health

12 Guide

 How Environmental Noise Harms the Cardiovascular System

14 Mind & Body

 Can you hear me? The connection between noise pollution & hearing loss

16 Guide

 How to conserve Energy at your Home (& Produce too)

18 Mind & Body

Mind your Mind on Climate Change

20 Special Focus

The power of forgiveness

• Is spending too much time in AC making you Sick?

24 Fitness Today

Trekking for Mind, Body & Soul

26 Leisure

· Offbeat Destinations in India

28 Technology

Facial Detection APIs that Recognize Mood

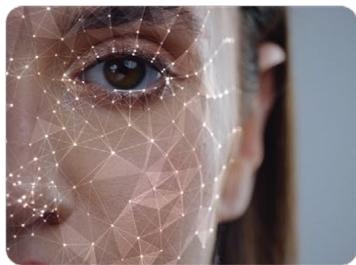
30 Food and Nutrition

· Having Vitamin D and B12 Deficiency Together

31 Bibliography









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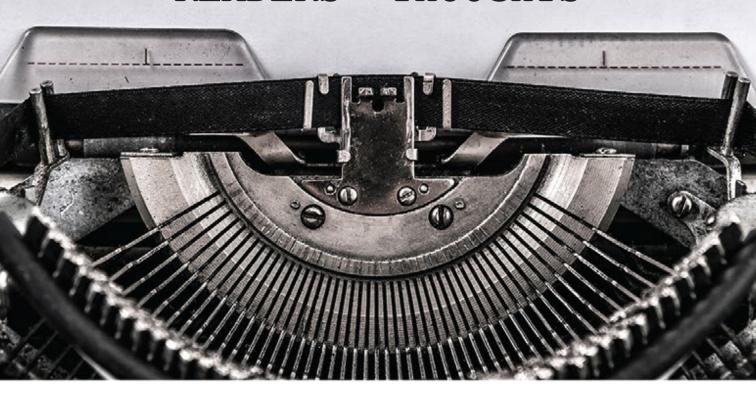
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READERS' THOUGHTS



RHealth Beat is a great initiative to keep us updated on health and fitness issues concerning us since wellness is one of the prime concerns we face today. The team has come together in a wonderful effort to bring all aspects of recent developments in the health sector collated in an interesting presentation in this magazine.

RHealth Beat is very informative & covers all the topics for the young & the old. A cumulative experience of the present & future.

Varied topics of Health, Food, Travel, and Technology are interesting & develop a craving to know more. Rcare service is appreciable. Best wishes to the Team.

The content shared is insightful, and appropriate with updated knowledge that is applicable to this current changing & fast-moving lifestyle. A commendable initiative by RGICL. All the best to the RHealth Beat team.



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In the last 130 years, the world has warmed by approximately 0.85°C. Each of the last 3 decades has been successively warmer than any preceding decade since 1850.

These are significant impacts of climatic change in the form of changing weather patterns, rising sea levels, melting of glaciers, forest fires, changing precipitation patterns and more extreme weather events, such as Floods & Tsunamis. Globally an estimated 12.6 million deaths are caused by avoidable environmental risk factors every year.

PUBLIC HEALTH IMPACT

Climate change affects the social & environmental determinants of Health - Clean air, safe drinking water, sufficient food & secure shelter - creating unanticipated health problems in places where they have not previously occurred, disturbing food-producing ecosystems and increasing the frequency of extreme weather events.

According to the **World Health Organization (W.H.O)**, researchers predict that certain effects of climate change will contribute to an increase of about 2,50,000 deaths per year between 2030 & 2050 from conditions such as Heat stress, malnutrition, diarrhea & malaria. Factors such as drought and plummeting fish stocks can lead rural populations to move into urban centers. Living in urban areas can increase the risk of disease due to overcrowding and higher temperatures.

According to the National Institute of Environmental Health Sciences, scientists believe that environmental factors play a role in the development of both Parkinson's & Alzheimer's disease. Toxins in food and water can also lead to health issues in a developing fetus. For example, climate change can cause harmful algal blooms, which increase the biotoxins in fish and seafood. An increase in heavy metals, such as mercury and lead, contaminating seafood can lead to a reduced IQ in a developing fetus.

Higher levels of dust, ozone, & fine particles in the air can all reduce air quality & cause or exacerbate a range of health issues including Asthma, COPD, and inflammation of the lungs, risk of lung cancer, airway congestion & chest pain

Increasingly variable rainfall patterns due to climate change are likely to affect the supply of fresh water. A lack of safe water can compromise hygiene and increases the risk of diarrheal diseases, trachoma (an eye infection that can lead to blindness) and other illnesses.

Climate change enhances the transmission season & expands the geographical distribution of vector-borne diseases as warmer temperature and humidity favor the breeding of insect vectors and also alters the geographic distribution of existing vectors.



MENTAL HEALTH

Extreme weather & Natural disasters can be traumatic and stressful for the people whom they affect. People may undergo displacement, injury, loss of their home & possessions, or the loss of loved ones.

Extreme heat may also have a more significant effect on people with mental health conditions. According to the **Centers for Disease Control and Prevention (CDC)**, suicide rates increase with higher temperatures. The CDC suggests that climate change and higher temperatures have a negative effect on depression and other mental health conditions. Researchers have found that natural disasters, such as Hurricane Katrina, have negative mental health effects on those involved, including PTSD with high levels of anxiety.

PROTECTING HEALTH FROM CLIMATE CHANGE

In late 2015, to address climate change, more than 190 countries approved the Paris Agreement at the 21st session of the Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC). In the agreement, all countries agreed to work to limit global temperature rise to well below 2°C and to make best efforts to keep it to 1.5°C, for the achievement of the Sustainable Development Goals.

POSITIVE CO- BENEFITS

Steps to reduce greenhouse gas emissions can have more immediate positive health effects, reduce carbon dioxide emissions and air pollution; and help prevent diseases like diabetes, heart disease and cancer.

We have a much better future in store for us if we act quickly and make significant changes in our lifestyle.



Replace old appliances with energy efficient models & light bulbs.



Save electricity by turning them off completely when not in use.



Reduce, reuse, and recycle waste.



Green your surroundings & cut down on waste.



Bike, walk or take public transport. Save the car trips for when you've got a big group.



Use renewable energy. If you have the option, install solar panels in your house.



Bring your own bag when you shop.



Compost—composting food scraps can reduce climate impact while also recycling nutrients.



CLIMATE ENGINEERING TECHNIQUES

O1 It can be broadly classified into two categories:



Negative emission technologies (NETS)

CO2 reduction conditions, so more of the gas can be absorbed from the atmosphere.



Solar radiation management (SRM)

techniques seek to reduce how much the sun warms the planet.

Most of these techniques work in theory, but none have been tried on a large scale.

O2 The Helmholtz Centre researchers looked at five techniques in particular:



A forestation

involving irrigating deserts to allow vegetation to grow and absorb CO2.



where long pipes pump cold, nutrient-rich water from the deep ocean to the surface – effectively swapping the ocean's top and bottom layers – this will absorb CO2 directly from the atmosphere and stimulate plants to grow and take up more CO2.



THERMOSTAT

If someone offered you a magic pill that claimed to cure all health ailments, would you take it? Let's say you did. Perhaps you'd start eating ice creams & pizza for every meal, since proper nutrition would no longer be a concern. You could forgo all prescribed medications. And maybe, that exercise regimen would fall by the wayside too. The risk, of course, is that the pill would fail, or come with an unintended consequence.

The concept of climate engineering - large-scale efforts to manipulate the "Global thermostat" - is like a magic pill for Climate change. Rather than transitioning society & the economy from fossil fuels to renewable energy, or focusing on social change to reduce greenhouse gas emissions, some seek to solve climate change with a sweeping technological fix by using climate engineering.

Researchers from the Helmholtz Centre for Ocean Research in Germany modelled how a range of climate engineering techniques could constrain global warming over the coming decades. Their results suggest the dangers that could outweigh its benefits.



Ocean alkalinisation

where lime is added to the ocean to alter its chemistry and increase its capacity to absorb CO2.



Ocean iron fertilization

where iron filings are put in the ocean to increase plant growth which absorbs more CO2 from the atmosphere.



Solar radiation management

which involves reducing the amount of sunlight that hits the earth's surface.

THE AFTER EFFECTS?

Even if Climate engineering does have a small positive impact on emissions & temperatures, there are dangers involved with rolling out climate engineering on a large scale.

In particular, once climate engineering is started, stopping it could cause rapid climate change, as warned by Researchers.



If solar radiation management were stopped, emissions and temperatures could rise to around 3.5 degrees in 30 years. If ocean upwelling were halted (the blue line), it could get even warmer - with temperatures rising beyond the level they otherwise would have by 2100. The techniques alter the salt & temperature layers in the ocean as well as circulation patterns causing the earth to take up additional heat & store it below the surface of the ocean. The heat would be released back into the atmosphere causing the temperature to rise rapidly

POTENTIAL HEALTH IMPACTS.

For direct health hazards such as heat exposure from rising temperature, Climate engineering should mitigate exposure & mortality. Warming temperature is predicted to facilitate the spread of re-emergence of vector borne diseases such as Malaria, Dengue fever, Zika.

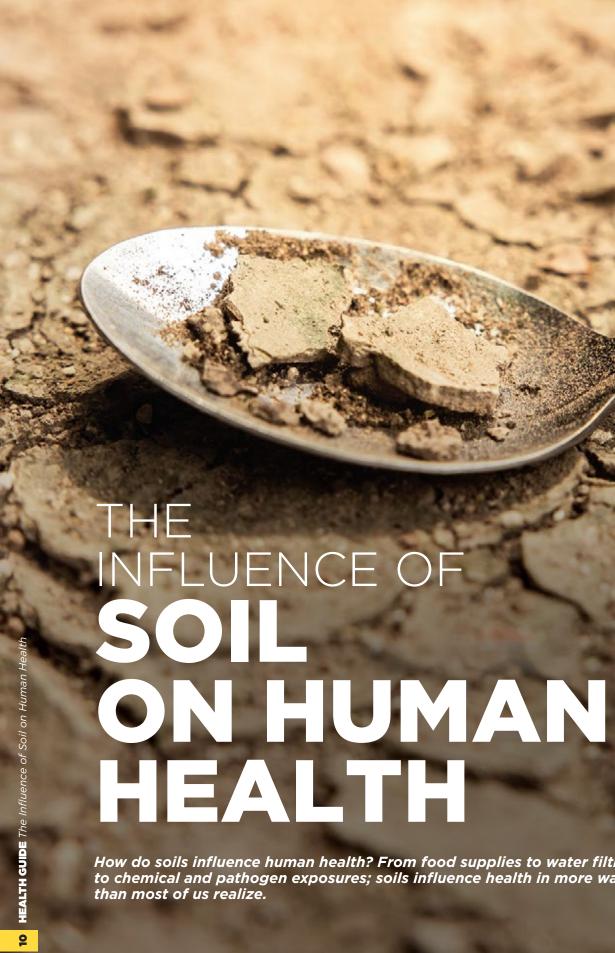
Links between disease & seasonal weather extremes add another dimension of complexity. A predicted reduction in monsoon rainfall due to SRM may severely exacerbate cholera risk; monsoon dilutes the concentration of the Vibrio bacteria, changing salinity & pH in ways typically unfavorable for environmental persistence. Climate models suggest sudden implementation could even trigger a severe El sino southern oscillation (ENSO) like event which could have significant consequences for arboviruses. ENSO has already been strongly implicated in the severity of the 2015 Zika pandemic & also contributed to various diseases such as yellow fever & cholera.

NETS also have potentially large health impacts. The potential indirect health effects of this are large food insecurity replacing food crops by bio-energy crops & malnutrition increases susceptibility to communicable diseases, especially childhood diseases.

AGENCY & URGENCY

Without any certainty about how climate engineering would reshape the global burden of disease, the planetary health community finds itself at an alarming crossroads.

If given the potential of deployment in the next few decades, we believe the planetary health community will face an urgent need to begin forecasting the shifting burden of disease in an engineered planet. In an ideal world, this body of research will be incorporated smoothly into the global decision making process, but as a last resort, it is critical for our community to start anticipating the possible healthcare crises we might face while venturing into the unknown.



How do soils influence human health? From food supplies to water filtration to chemical and pathogen exposures; soils influence health in more ways



INTRODUCTION

Soil has a substantial effect on human health, whether those effects are positive or negative, direct or indirect. It is an important source of nutrients in our food supply and medicines. However, nutrient imbalances and the presence of human pathogens in the soil biological community can cause negative effects on health. There are also many locations where various elements or chemical compounds are found in soil at toxic levels, because of either natural conditions or anthropogenic activities.

HUMAN NUTRIENT SUPPLY FROM SOILS

Soil is a major source of nutrients for plant growth. When we consume plants, these nutrients also provide support in human growth & function.

OTHER SIDE OF THE COIN

Exposure to heavy metals through soil contact is a major human health concern. Heavy metals are released into soils from landfills that contain industrial & household wastes and from sewage sludge that comes from wastewater treatment plants. E-wastes, or wastes associated with electronic appliances, are an increasing source of lead, antimony, mercury, cadmium & nickel in the soil. Urban soils are particularly susceptible to significant accumulations of heavy metals from automobile exhaust, coal burning, erosion of metal structures, and refuse incineration.

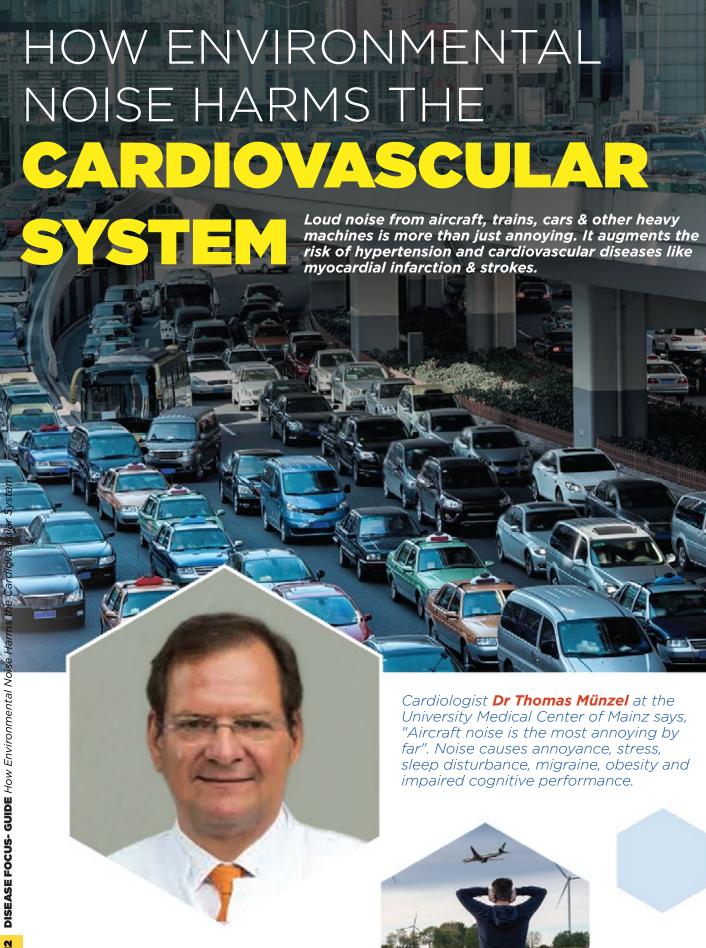
In agriculture, the use of fertilizers, manures, & pesticides has also contributed to the accumulation of heavy metals in soils. Arsenic has been used in pesticides, & the build-up of arsenic in orchard soils is unsettled since it may persist for decades. Certain heavy toxic metals can disrupt enzymatic activities commonly affecting the brain & kidneys.

SOIL PATHOGENS

Although most organisms found in soil are not harmful to humans, soil does serve as a home for many pathogenic organisms.

Helminths are parasites that may inhabit the human intestines, lymph system, or other tissues. Billions of people are infected by helminths worldwide each year, with an estimated 130,000 deaths annually. Helminth infections generally occur through ingestion or skin penetration, and in most cases involve infection of the intestines. Pathogenic viruses are usually introduced into soil through human septic or sewage waste. Viruses that cause conjunctivitis, gastroenteritis, hepatitis, polio, aseptic meningitis, or smallpox have all been found in soil.

More research is needed to fully understand the effect of soil on human health. By collaborating together with specialists from different fields we can study & apprehend the relation of the soil & human health connection.



HEART-BREAKING EFFECTS OF NOISE POLLUTION!

Any sound, may it be music or a loud noise whilst reaching the brain, activates two important cerebral regions - the Auditory cortex, which interprets noise, & the Amygdala, which manages emotional responses to it.

As the noise gets louder, & especially during sleep, the Amygdala activates the body's flight - or - fight response - even if the person isn't aware of it. As a result, one can feel anxious and annoyed even while asleep & not realize its actual impact. This, in turn, activates the stress response by activating the Autonomic (Sympathetic) nervous system & certain glands like the pituitary and adrenal. As a result, the hormones such as adrenaline & cortisol get released into the bloodstream. As an effect, the arteries constrict, raise blood pressure, and hamper metabolic activities while increasing lipid profile, blood sugar, blood viscosity, affecting blood clotting factors and so on.

The continuous stress response prompts the creation of harmful molecules that causes oxidative stress & leading to damage to the inner lining of the blood vessels (endothelium), including cardiac arteries. Parallelly, the release of specific chemical mediators & oxidative factors enhances the damage to a higher level.

With all these, a person ends up getting various patterns of cardiovascular illnesses, including high blood pressure, plaque build-up in the arteries, obesity, high lipid profile & diabetes.

A recent study by Halonen et al. involving over 8 million people in London assessed the effects of long-term exposure to road traffic noise, showing a prevalence of stroke in the elderly population. Furthermore, according to the European Cardiology review, Noise pollution can affect sleep patterns & is associated with increased cardiovascular morbidity & mortality.

But thankfully, there is a growing recognition of the connections between noise pollution & reduced physical health.

Moreover, high *nocturnal noise* levels increase cardiovascular risk factors with potentially serious ramifications.

WHAT IS AN ACCEPTABLE LEVEL OF NOISE?

The sound becomes unhealthy noise levels, typically around 70 - 80 decibels (dB). For comparison, ordinary conversation generally is about 40 dB, cars & trucks range around 70 to 90 dB, & sirens & aeroplanes can reach 120 dB or more.

The W.H.O. has identified a threshold of >55 dB spectrums is affected by traffic noise in the developed world.

NOISE POLLUTION POLICY UPDATES:



• Some governments have begun considering night-time flight bans

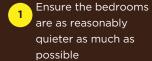


· Corporate setups are incentivizing quieter technologies



Civic authorities are issuing fines for noise complaints

WHAT CAN WE DO?





Retrofit windows or hang noise-reducing curtains



If one can afford it, move to quieter neighborhoods



Antioxidant vitamin C was found to ameliorate impaired endo-vascular function.



Cheaper solutions would be to wear earplugs at night.

A WORD OF CAUTION?

Just because you consider a noisy environment the new normal or are unfazed by noise does not mean your heart is just okay with that. If you have habituated to it psychologically, it doesn't nullify the negative health consequences.



CAN YOU HEAR ME? THE CONNECTION BETWEEN

NOISE POLLUTION & HEARING LOSS

Welcome to the noisy modern world! Unless you are lucky to live in a quiet rural area, you are no longer a stranger experiencing environmental noise, commonly called noise pollution. We might become tolerant of various noises & sounds which include the sound of music from your neighbor's music system, the honking cars, barking dogs, sirens, and maybe even the ear-shattering noise of a saw, a drill or a jackhammer from a construction site. Eventually, we become habituated to the loud noises though it ultimately hampers our hearing, be it temporary or permanent. It's often referred to as the "modern unseen plague" for a good reason.

Regular exposure to noise pollution affects the physical & mental well-being. According to the World Health Organization (W.H.O.), more than 8 hours of constant noise exposure beyond 75 dB(decibel) or higher can be detrimental. Therefore, a person working more than 8 hours in such a surrounding would encounter a significant

NOISE POLLUTION AROUND THE WORLD

Bigger the city, the higher the noise! Heavy traffic almost 24x7 enhances the level of stress & Noise Induced Hearing Loss (NIHL) in the city dwellers.

The World Report on Hearing 2021 revealed that nearly 1.5 billion people worldwide live with some degree of hearing loss, and almost 430 million have moderate to severe hearing loss. In addition, the study found that Guangzhou, China has the highest incidence of noise pollution, whereas Zurich, Switzerland, has the lowest. The top five cities with the most increased noise pollution include Delhi, Mumbai & Istanbul.





But when you walk the same pathway, again and again, they wear down and finally disappear!

The same thing happens with the ears. We have very delicate hair cells in our ears. These hair cells are specialized inner-ear cells responsible for the transduction of sound-evoked mechanical pulsations into electrical signals to be relayed to the brain.

While responding to sound waves, these hair cells bounce back during a recovery period. But when loud sounds repeatedly pass through the ears for an extended period or at high intensity, they overwork hair cells in the ear, which can cause these cells to die. Along with them goes our ability to detect sound and send noise signals to the brain.

SECONDARY IMPACT

Noise pollution may cause more than just hearing loss. The other effects also include:



Hypertension & other cardiovascular effects



Higher depression, anxiety & irritability.



Various sleep disturbances



High-pitched ringing in the ears(Tinnitus)or distorted hearing



Negative effect on child's communication, speech development & concentration.



Although we may adjust to the loud sounds over time, unfortunately, our ears and brain will not. By the time we realize the damage, it might have become irreversible. Here are some tips for you:

- Know when it's too loud: Promptly move away from the site. Raise your voice only to be heard when someone is within an arm's length.
 - Our habits: Our most minor step may be an effective contribution to the fight against noise pollution.

 Minimize the noise produced by you; let's turn down the volume.

- Use Personal Protective Equipment (P.P.E.): Use soft foam earplugs; workers must wear hearing protectors when engaged in work that exposes them to noise that equals or exceeds 85 dBA.
 - **Take a break** from listening to loud music.
- Keep equipment well lubricated and maintained: Reduce equipment noise by replacing worn, loose, or unbalanced machine parts.

Keep the noise low, else the noise will keep your hearing low.



MIND & BODY Can you hear me? The connection between noise pollution & hearing loss

HOW TO CONSERVE ENERGY AT YOUR HOME

(& PRODUCE IT)

One of the best ways to go green at home is to think about ways to save energy; it goes hand in hand with an eco-conscious home.

WHAT IS ENERGY CONSERVATION?

As you think of creative ways to save electricity it starts by making a conscious decision to use less energy. Most people at the start of the year wish to save money so it is quite beneficial in the long run, especially if you're already taking steps to lead a sustainable life. Not to mention by lowering the amount of energy we use, we slow down fossil fuel depletion & help clean up the environment.

DOES IT HELP TO SAVE YOUR MONEY?

By using less energy, consumers can help to conserve energy & reduce fossil fuels. In addition, we are already exploring creative ways to improve our renewal energy sustainability options, like, solar, wind, & hydroelectric power. As we start to rely more on our renewable sources then we can save our fossil fuels & slow down the price increase.



CONSERVING ENERGY

There are lots of little steps to take to conserve energy, waste less & cut back on utility bills. Here are a few you can start looking at today.



Work smart with lighting: When they're not in use, turn off lights around the house & open your curtains to utilize natural light throughout the day.



Do Laundry efficiently: Cut down on your weekly loads, or if possible, wait for a full load before running your appliances. Let your dishes air dry and hang clothes on a clothesline where it's possible.



Turn off Television, computers, laptops when not in use.



Cook differently: If you have an electric stove, start using a microwave for cooking some dishes & warming up leftovers. A microwave can cook a 1 - hour stovetop in 15 - 20 minutes, making it one of the best ways to save energy at home.



Save when you shower: Taking shorter showers or turning the water off while we shave can save up to 20 liters of water for every minute we cut down. You can turn the geyser off when you brush your teeth or wash your hands, thereby saving 5% of energy in hot water usage.



Take care of Electrical issues & Insulation: If a home is adequately insulated, it will efficiently retain heat during the winter & cool the house down during the summers.



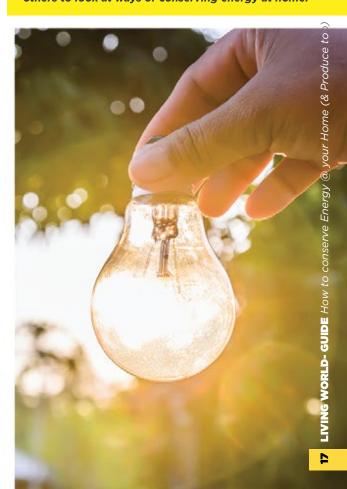
Purchase Energy - Efficient Household Appliances: Look for appliances with ENERGY STAR logos & ratings while also considering the initial purchase price. Replacing old appliances with energy - efficient models is one of the best ways to save energy & can reduce approximately 13% of the total household energy usage per month.

PRODUCE YOUR OWN POWER

The other big element to being sustainable is looking to create your own power - electricity. There are many renewable options that can be used in almost any home to generate electricity.

- **Solar Thermal**: A solar panel can be used alongside an existing system. This means when there is sunlight, we can generate power to heat water. **Photovoltaic**, another type of solar panel, also produces electricity from sunlight.
- **Wind Turbines**: Most of the time, wind turbines are massive things seen in hilly fields or at sea. However, smaller versions are available that can be installed at home post taking adequate permissions from local authority.
- **Heat Pumps**: They work on the principles of refrigeration (Vapor compression) to create heat from water, ground or air & then transfer to an electric pump. Make sure that your house is well insulated if you opt for it.

Although this article only mentions a few, households can do a lot to reduce their energy consumption. Every small change that we make will lead to big savings, & luckily there is no - cost, low -cost, and permanent changes to choose from. Starting is the first best step that you may take, and also encourage others to look at ways of conserving energy at home.







HERE ARE SIX KEY INSIGHTS HAYHOE SHARED IN HER TALK:

Understand how polarizing the issue of climate change

is: A number of people were troubled by the changing climate & weather who'd been persuaded by Heat waves, fires, torrential rain, & the Great Barrier Reef dying. Some were swayed by the strong desire, whether stemming from love of nature, to care for the planet regardless of whether or not climate change is occurring.

Appreciate that people have different ways of thinking:

To get through to people in a polarized world, one should accept that not everyone will think the same way you do. Hayhoe talked about how the scientists who tend to approach the world with a critical eye for data; differ from many members of the public at large. Words like "theory" or "significant," which mean one thing to researchers, may mean something entirely different to laypeople.

Recognize that no one is a blank slate: One popular rationale for why many people reject climate science, the knowledge deficit model, holds that people are willing to process information if it's available. This model supposes that any lack of public support for climate science is simply caused by a lack of information.

Connect with shared values: An emotional connection can go a long way. To really get through to people, start by identifying some value that you share. Find a common interest: Hobbies? Children? Location? If you connect this shared value to climate change, you can reach out from a place of empathy & mutual interest.

Inspire with solutions: When looking at policy to address climate change, it sometimes even pays to couch appeals in tangible, local benefits outside of mitigating climate change. If we connect with a shared value and inspire with a bright future, we have a chance to bring new people into the fold on climate change.

While agreeing on solutions may be challenging, there are goals that members of our society should be able to support, such as the need for clean air and water, reduced pollution, innovative energy solutions, enhanced public health and sufficient food, water, shelter, and energy for all. And regardless of differences in belief, everyone will benefit if we were able to achieve these goals.



MINDFULNESS The Power of Forgiveness

THE POWER OF FORGIVENESS

People can hurt us in million ways, & forgiveness isn't always easy. Whether you've been cut off in traffic, slighted by your mother-in-law, betrayed by a friend, or badmouthed by a co-worker, most of us are faced with a variety of situations both serious & mundane that we can choose to ruminate over or forgive. But forgiveness, like so many things in life, is easier said than done.

THE CHALLENGE OF FORGIVENESS

Many people will agree with us, when we say that it's hard to forgive. Almost everyone has experienced being wronged by someone. But hanging onto those negative feelings can do great harm to your health.

"Forgiving a person who has wronged you is never easy, but dwelling on those events & reliving them over & over again can fill your mind with negative thoughts & suppressed anger," says Dr. Tyler Vander Weele, Co-director of the Initiative on Health, Religion, & spirituality at the Harvard T.H Chan School of Public Health.





IMPORTANCE OF FORGIVENESS

According to a study in 2004, the inability to forgive was linked to anger & hostility, and those, in turn, have proven to have negative health effects, especially concerning cardiovascular conditions. Another study stated that holding a grudge, reliving painful memories, and harboring resentment have a negative impact on emotional well-being & physical health.

Forgiveness is associated with lower heart rate & blood pressure as well as overall stress relief. It is also associated with improving physical symptoms, reducing fatigue in some patient populations, & improving sleep quality. In the psychological domain, forgiveness has shown to diminish the experience of stress & inner conflicts while simultaneously restoring positive thoughts, feelings, & behaviors.

Forgiveness also improves our relationships. One study suggested that people who forgive have reported to have greater relationship quality & greater commitment to relationships while people who showed high motivations for revenge & avoidance have lower relationship satisfaction.





REACHING FOR A SOLUTION

One of the best ways to practice forgiveness is with the REACH method. REACH stands for Recall, Emphasize, Altruistic gift, Commit, & Hold. Let's take a look at each step.

Recall: The goal is not to think of the person in a negative light nor to wallow in self-pity, but to come to a clear understanding of the wrong that was done. Visualize the person & situation & all the feelings that come with it. Don't push aside anything, especially if it makes you feel angry or upset.

Empathize: Next, try to understand the other person's point of view regarding why he or she hurt you, but without minimizing or downplaying the wrong that was done. Sometimes the wrongdoing was not personal, but due to something the other person was dealing with. "People who attack others are sometimes themselves in a state of fear, worry, and hurt", says Dr. Vander Weele.

Altruistic gift: This step is about addressing your own shortcomings. Recall a time when you treated someone harshly & were forgiven. How did it make you feel? Recognizing this helps you realize that forgiveness is an altruistic gift that you can give to others.

Commit yourself to forgive: For instance, write about your forgiveness in a journal or a letter that you don't send to tell a friend. "This helps with the decisional side of forgiveness", say Dr. Vander Weele.

Hold: Finally, hold on to your forgiveness. This step is tough because memories of the event will often recur.



Forgiveness may not always be easy, but it can be easier with a few exercises & the right mindset. First, keep in mind that forgiveness is something you do for vourself vour attachment to what happened. (Think of taking your hand away from a hot burner on the stove - it remains hot, but you move away from it for your own safety). Also, remind yourself that you are moving forward, & forgiving this person allows them (or at least what they've done) to stay in the past as you move on. Journaling, Praying, Meditation & Kindness can all be helpful in easing yourself into forgiveness as well.







When the mercury soars, it can be hard not to reach for that air conditioner remote. Air conditioners (ACs) are a lifeline for most people today; especially when you have unreasonably warm days & summers are hotter than ever! But they can have some unpleasant & downright harmful effects that you may not always be aware of.

Dehydration rates are known to be higher in rooms that are air-conditioned. This happens as ACs pull out humidity from the air & are not selective about the moisture that they pull. If your skin is not sufficiently protected to combat it, **constant dryness** will affect the inner layers of the skin making it dry & flaky. This, in turn, fastens aging & makes skin prone to other **skin disorders**.

Another unfortunate side effect of AC spaces, especially if they are not maintained properly, is the susceptibility to **headaches & migraines** when the indoor air quality levels dip. When our body stays in temperatures that are below its liking, it develops pain in the joints and muscles which may become rheumatic over a period of time. If the situation gets severe, such pains can develop into **arthritis**.

Lack of fresh air can leave one with a sense of **perpetual fatigue & tiredness. Upper respiratory symptoms** tend to crop up more in people who spend a lot of time in places that are air-conditioned. These may include nasal blockage, a dry throat, or even rhinitis.

As ACs dry out the nasal passages, this may lead to cause **irritation** in mucus membranes. In the absence of adequate protective mucus, we become more vulnerable to various viruses. Notorious microbes like the bacteria that cause **Legionnaire's** disease (A lung infection caused by bacteria Legionella), for instance, thrive in artificial water supply systems, including AC units & systems.

After reading the above discussion, you might be forced to think if air conditioning is bad for you. Well, the answer is no! They are not bad for your health. They are in fact, a good choice for those who are suffering from different allergies. It only becomes a matter of concern when not maintained or cleaned regularly & properly. Keep your ACs clean as well as your house, maintain a comfortable temperature, and you should have no problems!

Switch them on when it is required. Limit the use of soap and water to areas where skin is prone to get dry. Use water-based lotions to add moisture to your skin. If you are experiencing exhaustion, headaches, and sore muscles and joints, turn that AC down!

To sum it up, your AC is not making you sick & you can enjoy the cool air while taking a few precautions.



TRAINING THE BODY

Trekking is among the toughest of all the sports, with some treks lasting up to months in duration. Training is mandatory, not only in order to complete a trek but so as to avoid injury. A regular exercise program can help in accomplishing a trek.

If you are new to exercise entirely, you may need to start with one of two days a week, & upping this amount as time goes on.

A primary study conducted in 2014, indicated that 12 weeks of trekking at a moderate level of intensity on a regular basis can decrease the body weight of elderly obese women thereby promoting cardiovascular health & increasing muscle endurance.

HOW TREKS IMPACT THE MIND?

Exercise is notoriously considered difficult, both physically & psychologically. We need to combat our mind's own excuses (or a fear) that forms the cornerstone of the fitness journey. Self talk is an effective method with which we can reprogram the mind over a period of time. Moving out of the comfort zone is never easy, & so it is vital to self motivate.

On a trek, without the distractions of our regular world, the mind automatically starts to feel better. It is just us & nature.

Every hour on the trek these constant positive images are around us which has an immediate **calming effect**. When we trek, our body releases large doses of **endophins**, the hormone that makes us happy. Added to that there is a boost of serotonin that relaxes us. We get strong doses of Dopamine (which makes us feel accomplished, it triggers our reward centers). & there is a good amount of oxytocin (that gives us a sense of tranquillity & love). These hormones make us feel good, calm, connected, happy & energized.

SPIRIT & SOUL SEARCH

A trek helps us to rediscover our relationships & make us better human beings. In this modern world where acquaintances are fleeting, friendships fickle, the opportunity to bond so deeply on a trek is something that we cannot ignore. It also helps those struggling to get over their self imposed boundaries & makes them more resilient.

Trekking is physically draining which may diminish your spirits. To prevent this, it is recommended to practice daily meditation, which is known to promote a relaxed state of being. Meditation has been proven to reduce stress & also forms an integral aspect of trekking. Due to long stretches of walking on a trek, Trekkers have time for contemplation.

Contemplation is a form of meditation, reported to soothe the body, mind, & soul. From a holistic viewpoint, these aspects of the being are interconnected, & when one is out of balance it can result in ill health.

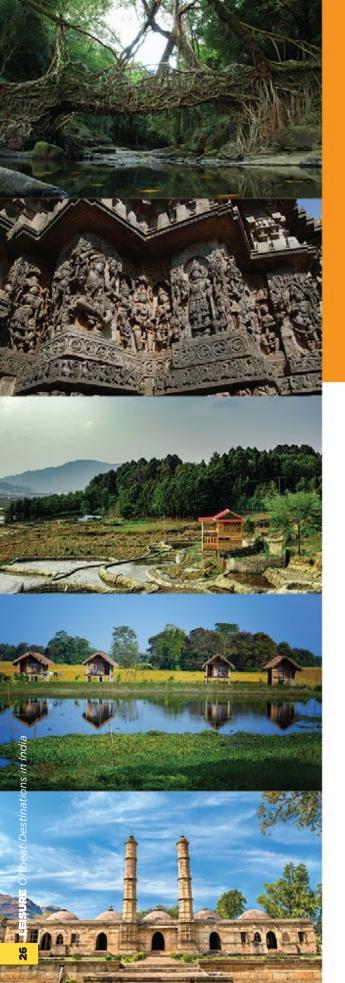
THE BOTTOM LINE

Trekking is a holistic activity, & it doesn't matter how fit you are, if your head & heart aren't in the game. Ultimately, Trekking promotes a balanced lifestyle, which in turn creates an environment for success.

Treks change lives, it changes our thinking & it changes how we deal with difficulties. It makes us more focused, creative & sensitive. It builds our bodies, makes us healthier.

If you haven't started trekking, then perhaps you must.





OFFBEAT DESTINATIONS IN INDIA

Tired of the known tourist trails? Seeking to get away to a new place? The offbeat destinations in India offer an awesome experience. Escape the hustle - bustle of cities & indulge in incredible experiences. Avoid crowds, explore raw natural beauty with diverse cultures, and get to experience a plethora of new things.

MAWLYNNONG, MEGHALAYA

Blessed with the charm of Northeast India, Mawlynnong has been awarded as the cleanest village in Asia in 2003. There are waterfalls to visit, caves to explore and most importantly walk on the Living Roots Bridge, created out of the roots of the trees, the bridges are truly a wonder.

HALEBID, KARNATAKA

One of the ancient temple towns of South India, known as Dwarasamudra, gateway to the seas, Sacked by the armies of Malik Kafur in the early 14th century, the town fell into a state of ruin. Even in the ravaged state, the town's glory still remains undiminished.

ZIRO, ARUNACHAL PRADESH

Away from the touristy trails, Ziro is among the most beautiful offbeat destinations in India. Beautiful green patches and rice fields are visible as far as the eye can see. In addition, the Apatani tribe welcomes you with their friendly smiles and you would love to know their way of life.

MAJULI, ASSAM

The largest river island in the world is located on the banks of the Brahmaputra River. The island of Majuli is only accessible via ferries which can be taken from Jorhat. Mostly tribals inhabit the lands.

CHAMPANER - PAVAGADH, GUJARAT

One of the UNESCO World Heritage Sites, Champaner is a historical treasure. The Champaner-Pavagadh Archaeological Park is a delight dating back to the 8th - 16th century. This site was once an important religious shrine and point of pilgrimage. Despite its ruinous condition today, it is as special as it is intriguing.

HEMIS, LADAKH, JAMMU & KASHMIR

Hemis is a beautiful place surrounded by snow capped ranges all around. The Hemis National Park, the home to the snow leopard is thrilling. Carry your camera, if luck favors you can capture a click.

MANDU, MADHYA PRADESH

The town of Mandu is a testament to the love between Prince Baz Bahadur and Rani Roopmati. Explore the awe-inspiring Islamic architectural brilliance displayed in Mandu Fort, Jahaz Mahal, Jami Masjid, Hindola Mahal, Baz Bahadur's Palace, Rewa Kund etc.

TADOBA, MAHARASHTRA

The town in Maharashtra is known for Tadoba National Park, Tadoba-Andhari Tiger Reserve, Tadoba Lake, Erai dam, Moharli and Khosla village. It is often named as the 'Jewel of Vidarbha'. Perfect for wildlife vacations and to spend time away from cities, Tadoba is one of the best-kept Tiger Reserves in India and the largest in Maharashtra. Go for safaris or opt for a jungle stay.

SUMBUK, SOUTH SIKKIM

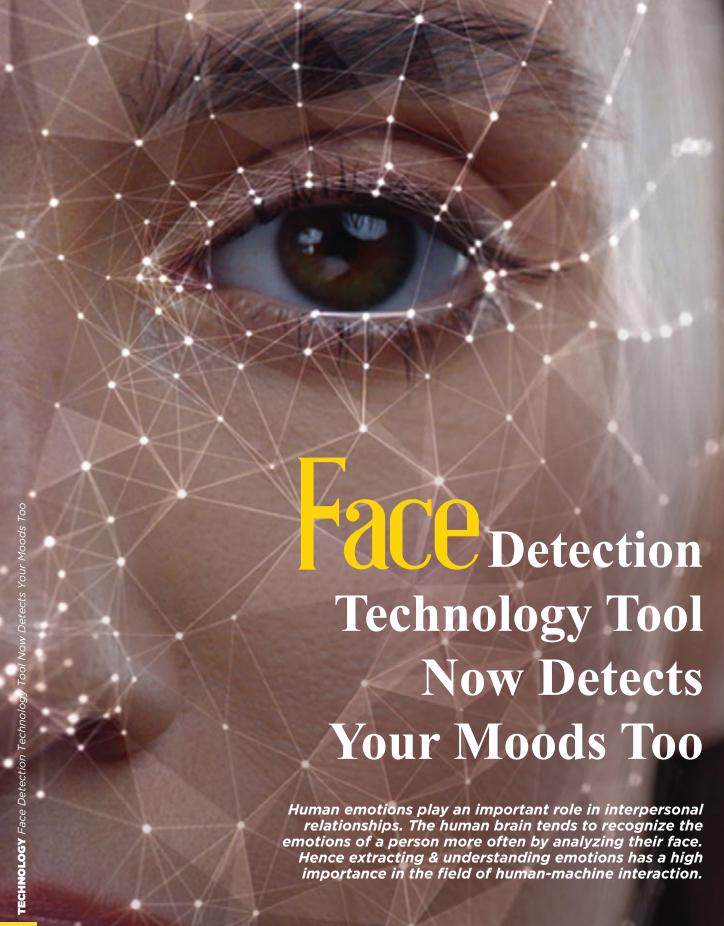
It does not end just as a birding place, in fact, being an offbeat place in Sikkim, you can expect a raw nature, thus offering excellent places for trekking.

DHANUSHKODI, TAMIL NADU

Dhanushkodi has earned its reputation for being one of the haunted places in India. Often tourists come here to witness the spectacular natural Adam's Bridge that almost joins Sri Lanka. A few not to miss tourist sites are the Church and an old railway station; you can see only the ruins left after a devastating cyclone hit in 1964.

With a list of tourist friendly places in India we come across, often transportation & staying accommodations tend to give an ache to the journey. Luckily, these mentioned exuberant offbeat places provide homestays, hotels and even options to camp. You are for sure to enjoy a holiday in India out of the monotonous places and to some new destinations. Take your pick. Or, like us, sit back next to your fireplace & marvel at the overwhelming beauty that surrounds you.





Facial recognition softwares such as Inferdo, Microsoft computer vision API, Face++, and EyeRecognize are winning the global market of digital products. They are used in various business fields such as marketing strategies and are an essential part of cyber security systems.

Facial expression recognition (FER) systems use computer-based algorithms for the instantaneous detection of facial expressions. For the computer to recognize & classify the emotions accordingly, its accuracy rate needs to be high. Although various sensors such as an Electromyograph (EMG), Electrocardiogram (ECG), Electroencephalograph (EEG), and camera can be used for FER inputs, a camera is the most promising type of sensor because it provides the most informative clues for FER.

CONVENTIONAL FER IS COMPOSED OF THREE MAJOR STEPS

TEP (2)

Face and Facial
Component Detection

STEP Feature

O2 Extract

STEP 03

Expression Classification

To achieve higher than this, a Convolution neural network (CNN) model is used. A Neural Network is a combination of a number of neurons which take in input and provide an output by applying an activation function. A CNN model works well with a larger database as it trains the model with specific features of each image in the database. The time consumed by this model is significantly less compared to other models.

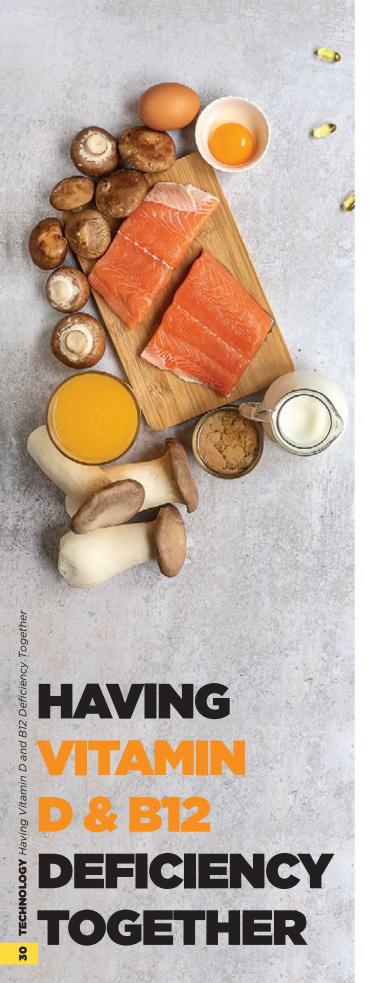
TECHNOLOGY FOCUSING ON EMOTIONS

Car Manufacturers around the world are increasingly focusing on making cars more personal & safe for us to drive. Using facial emotion detection smart cars can alert the driver when he feels drowsy & thereby preventing any fatal road accidents.

This technology is also being widely employed within healthcare. A prime example of this is its use with early detection of Autism. Autism is a neurodevelopment disorder that affects just under 1% of children. An early intervention has been found to have the greatest impact on later social capabilities, early diagnosis & also receiving the best possible care. A recent research project combined ECG, EDA, and eye tracking to monitor how patients respond to socially stressful virtual environments. This helps in handling stress over a period of time.

CONCLUSION

Emotion recognition technology is coming of age. While we have covered some examples of emotion recognition technology in use today, there are plenty more arenas in which this technology is applied, & many more that will see such an implementation in the near future. Future technology has always been getting smarter, but now it's also becoming more human.



Vitamin deficiency is more common than you think & can have serious health impacts. Numerous diseases like cancer, Alzheimer's, depression, osteoporosis, Crohn's Disease, & cardiovascular disease are all linked to low levels of both vitamin B12 & D. However, the physiological relationship between these two vitamins is still unclear.

A COMMON DENOMINATOR IS OFTEN RESPONSIBLE

While medical science has yet to show that Vit.D & B12 are linked in the sense that one can trigger the other, the research indicates that there is often a common denominator responsible for both deficiencies.

For instance, Vegans & Vegetarians usually need to take supplements of both vitamins to keep their levels high because they aren't consuming many (if any) animal proteins.

A study from the Indian Journal of Occupational Environmental Medicine on 75 office executives in Mumbai, India found that 65% were vitamin B12 deficient & 28% were vitamin D deficient. In their case, both deficiencies were likely caused by a predominately vegetarian diet & little time spent in the sun due to long work hours.

Gastric bypass surgery is another common cause of vitamin D & B12 deficiency, as it reduces the stomach space available for nutrient absorption & speeds up the digestion process.

SIMILARITIES IN ABSORPTION LEVELS

Vit.D requires fat in your diet. While Vit.B12 doesn't need dietary fat, your body can't absorb it if your pancreas or intestinal lining is compromised.

Many studies link low vitamin D levels with a higher risk of Anemia. One study of pregnant women in Tanzania stated that those with low Vit.D levels were at higher risk of Anemia.

BOTH REDUCES RISK OF DEVELOPING CANCER

Research published in Dynamic Chiropractic notes that there is emerging evidence that lower than recommended levels of both vitamins can raise your risk of developing breast, colon, prostate, & other cancers. Vitamin D has also been found to decrease the proliferation rate of cancer cells, and sufficient levels of vitamin B12 are credited with helping new cells produce well-formed DNA.

HOW TO KEEP YOUR LEVEL HIGH

The standard adult dosage of vitamin B12 is 2.4 mcg per day and 1,000-2,000IU for vitamin D. Those who get little to no sun exposure might need to boost their levels to 5,000IU per day. Fatty fish, eggs, liver, whole milk, & fortified foods are all excellent sources of both nutrients.

Staying on top of your nutrient levels is critical to your overall wellbeing. By monitoring your vitamin levels & modifying them when necessary, you will ward off your risk of many diseases in the future.

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