

## Medtalk with Dr KK Aggarwal

**Free medicines and diagnostic tests will soon be available to patients with dementia** as part of an action plan being worked out by the Centre (Union Minister for Health and Family Welfare, JP Nadda).

**Do you know** blood pressure (BP) is very dynamic? A reading can change 10 or even 20 points over the course of seconds. That's why the current BP guidelines recommend waiting 1 minute, retaking the reading and averaging the two numbers. If the systolic values (the first number in a BP reading) are more than around 10 points apart, consider doing a third reading a minute later. Averaging three values will likely provide an even more trustworthy result.

**Best time to have coffee:** Caffeine can increase alertness, so having a cup or two of coffee or tea can help boost your body and sharpen your mind. However, try not to have large amounts after 2 pm, as the caffeine may interfere with the sleep.

**AHA's list of BP measuring mistakes.** Any of these errors may elevate your BP reading by several points (even as much as 10 points, in some cases), although they are generally not additive.

- ➲ Having a full bladder. An uncomfortably full bladder might increase your reading.
- ➲ Having no support for your back or feet. Slouching or dangling your feet when sitting can increase your reading. Make sure you sit in a chair with your back supported and feet flat on the floor or a footstool. At home, don't sit on a sofa or reclining chair.
- ➲ Sitting with crossed legs. Crossing your legs squeezes the large veins in your legs, which may raise the reading slightly.
- ➲ Not supporting your arm. Your arm should be totally relaxed so your biceps (upper arm) muscle isn't contracted. Be sure to position your arm on a chair or counter, so that the BP cuff is level with your heart. Also, don't clench your fist.
- ➲ Wrapping the cuff over clothing. Depending on the thickness of the fabric, putting a cuff over clothing can boost the reading by quite a bit. Wear a short-sleeved shirt (along with easily removable layers, if you're chilly in the doctor's office), so the cuff is placed on your bare arm.

- ➲ Using a cuff that's not the correct size. Many people need a large-sized cuff. Using one that's too small will be uncomfortable and may elevate your pressure by several points. Note that models with upper-arm cuffs are more reliable than those that fit on the wrist.
- ➲ Engaging in conversation. Chatting during the measurement - or even actively listening - can boost BP.

**The US FDA has found an additional "unexpected impurity"** in three lots of Torrent Pharmaceuticals' recalled valsartan drug. Recently, the Food and Drug Administration (FDA) said that three lots of the drugs were contaminated with a second impurity, N-Nitrosodiethylamine, or NDEA which is also a suspected human carcinogen... (CNN)

Tired of the high drug costs and shortages of life-saving generic drugs, major hospitals and hospital systems in the United States, including the Mayo Clinic, have come together to create **Civica Rx, a not-for-profit generic drug company**.

**An ambitious project to cleanup the ocean's plastic pollution got underway** over the weekend as members of The Ocean Cleanup project began towing their system out to sea. If it works as expected, they'll try to take a bite out of the Great Pacific Garbage Patch - a huge collection of floating trash that's three times the size of France, or about double the size of Texas. The Great Pacific Garbage Patch is the nickname for an area between Hawaii and California, where plastic and other human-made litter and debris accumulate, according to the National Oceanic and Atmospheric Administration... (CNN)

**What is the extent of information to be disclosed in the consent?**

The 3 Judges Constitution Bench of Hon'ble Supreme Court of India in the landmark judgment titled as "**Samira Kohli versus Prabha Manchanda, AIR 2008 SC 1385**" has held that:

*"32. We may now summarize principles relating to consent as follows:*

*(ii) The 'adequate information' to be furnished by the doctor (or a member of his team) who treats the patient, should enable the patient to make a*

*balanced judgment as to whether he should submit himself to the particular treatment as to whether he should submit himself to the particular treatment or not. This means that the Doctor should disclose (a) nature and procedure of the treatment and its purpose, benefits and effect; (b) alternatives if any available; (c) an outline of the substantial risks; and (d) adverse consequences of refusing treatment. But there is no need to explain remote or theoretical risks involved, which may frighten or confuse a patient and result in refusal of consent for the necessary treatment. Similarly, there is no need to explain the remote or theoretical risks of refusal to take treatment which may persuade a patient to undergo a fanciful or unnecessary treatment. A balance should be achieved between the need for disclosing necessary and adequate information and at the same time avoid the possibility of the patient being deterred from agreeing to a necessary treatment or offering to undergo an unnecessary treatment.*

*(v) The nature and extent of information to be furnished by the doctor to the patient to secure the consent need not be of the stringent and high degree mentioned in Canterbury but should be of the extent which is accepted as normal and proper by a body of medical men skilled and experienced in the particular field. It will depend upon the physical and mental condition of the patient, the nature of treatment, and the risk and consequences attached to the treatment."*

Thus, the nature and extent of information to be furnished by the doctor should be of the extent which is normal for medical men skilled and experienced in the particular field.

The doctor is required to furnish such adequate information so as to enable the patient to make a balanced judgment about his/her treatment/surgery. For this, the Doctor should disclose:

- ⦿ nature and procedure of the treatment and its purpose, benefits and effect;
- ⦿ alternatives if any available;
- ⦿ an outline of the substantial risks; and
- ⦿ adverse consequences of refusing treatment.

**Tobacco harm reduction:** The London-based Royal College of Physicians states "Although it is not possible to precisely quantify the long-term health risks associated with e-cigarettes, the available data suggest that they are unlikely to exceed 5% of those associated with smoked tobacco products, and may well be substantially lower than this

*figure"* (Royal College of Physicians [London], Nicotine without smoke: tobacco harm reduction. 28 April 2016).

**One in five men and one in six women worldwide, develop cancer during their lifetime,** and one in eight men and one in 11 women die from it, IARC's (International Agency for Research on Cancer) Global Cancer Observatory says, in its first report since 2012.

**Doctors being asked to ditch Latin and use 'plain English':** The Academy of Medical Royal Colleges says too often correspondence contains complex medical jargon rather than plain and simple English. Using the phrase "twice-daily" to explain the dosing of a medicine is better than the Latin abbreviation "bd", for example. The Please Write to Me initiative, led by Dr Hugh Rayner, a kidney specialist, is aimed mainly at doctors working in outpatient clinics, although it is best practice for all clinicians who need to write clinical letters... (BBC UK)

**The best way to use food as energy is to pay attention to the glycemic index,** which measures how quickly sugar from food is absorbed into your bloodstream. Refined carbs with a high glycemic index increase blood sugar levels to provide a quick jolt of energy. But the insulin pumped into the blood in order to control this sudden spike often leads to an equally sudden drop in blood sugar levels (**sugar crash**), which makes one feel even more tired. Eating foods with a low glycemic index can provide a slow and steady energy boost. The best choices are foods that rank from 0 to 69 on the glycemic index scale.

**'Napalm girl' undergoes laser treatment:** More than four decades after she suffered 3rd and 4th degree burns during a napalm attack carried out by South Vietnamese airplanes during the Vietnam War, the Vietnamese woman, aged 9 years then (1972), experienced significant improvement in her pain and burn scars after she underwent laser treatment. She suffered daily pain, which she rated 10 out of 10, due to scars which covered 40% of her body. After a series of laser treatments, she reported softening of the scars, increased range of motion, nerve regeneration and reduction in pain 3 out of 10. This case was published online September 5, 2018 in *JAMA Dermatology*.

**ICMR will launch Malaria Elimination Research Alliance India** (MERA INDIA) on November 15 to eliminate malaria from India by the year 2030. While major stakeholders of the alliance will be Union and State Health Ministries and National Programs, medical colleges, National Institute of Malaria Research (NIMR), World Health Organization (WHO), Medicines for

Malaria Venture (MMV) and several Multinational Companies (MNCs) will also be made partners... (*The Pioneer, Sept. 15, 2018*).

**'Swachhata Hi Seva' Movement' launched by the Prime Minister Shri Narendra Modi** to boost nationwide public participation in the Swachh Bharat Abhiyan, and catalyze the fulfilment of Bapu's dream of a Clean India. The movement is being organized in the run up to the fourth anniversary of the Swachh Bharat Mission, on October 2nd, 2018, which will also mark the commencement of the 150th year celebrations of Mahatma Gandhi.

**The diagonal earlobe crease may be a marker of heart disease:** As reported in ET Healthworld, September 16, 2018, Dr Himmatrao Bawaskar evaluated 888 patients; of these, 508 had diagonal earlobe crease. Of these 486 (95%) had ischemic heart disease, 264 (52%) had diabetes and 508 had high BP.

**Can a patient dictate as what all a doctor should write instead of following the protocol?**

No, the patient cannot dictate any doctor as to what write and doctors have to follow their protocol. As per the provisions of Clause 7.7 of the Indian Medical Council Professional Conduct, Etiquette and Ethics Regulations, 2002, the name of the doctor will be deleted from the register of Medical Council, if he is found to have signed or given under his name any certificate, report, etc. which is untrue or misleading. The provisions of Clause 7.7 are reproduced hereunder:

*"7.7 Signing Professional Certificates, Reports and other Documents: Registered medical practitioners are in certain cases bound by law to give, or may from time to time be called upon or requested to give certificates, notification, reports and other documents of similar character signed by them in their professional capacity for subsequent use in the courts or for administrative purposes, etc. Such documents, among others, include the ones given at Appendix-4. Any registered practitioner who is shown to have signed or given under his name and authority any such certificate, notification, report or document of a similar character which is untrue, misleading or improper, is liable to have his name deleted from the Register."*

Thus, in view of the above Clause 7.7, if the doctor writes what is dictated by the patient without following the proper protocol, procedure and the same is untrue, misleading or improper then the Medical Council of India or the respective state medical council will delete his name from the Register of the respective Medical Council in which the doctor is registered. Accordingly, the doctor shall be debarred from practicing medicine.

Recently, WHO said that there were **137 confirmed and probable cases of Ebola and 92 deaths** in the latest outbreak in the eastern Democratic Republic of the Congo in Africa.

**Poor progress has been made in reducing child stunting:** According to the UN report, "The State of Food Security and Nutrition in the World 2018". Nearly 151 million children aged under five are too short for their age due to malnutrition in 2017, compared to 165 million in 2012. Globally, Africa and Asia accounted for 39% and 55% of all stunted children, respectively. Prevalence of child wasting remains extremely high in Asia where almost one in 10 children under five has low weight for their height, compared to just one in 100 in Latin America and the Caribbean.

**Thirteen percent or 43 million Americans live in county with a primary care physician shortage,** defined as less than one primary care physician per 2,000 people, according to a report from UnitedHealth Group. Americans in rural areas are nearly five times as likely to live in a county with a primary care physician shortage compared to urban and suburban Americans; 38% vs. 8%. Only 33% of active US physicians practice primary care (2,88,000 out of 8,69,000). The estimated primary care physician shortage could increase from 18,000 in 2018 to 49,000 by 2030 ... (*Becker's Hospital Review, Sept. 11, 2018*)

**Scientists have found that kidney stones partially dissolve and regrow:** The findings showed that kidney stones are built up in calcium-rich layers that resemble other mineralisations in nature, such as those forming coral reefs. This contradicts the widely held notion that kidney stones are homogenous rocks that never dissolve (Bruce Fouke, geology and microbiology professor at the University of Illinois).

**People who feel younger than their actual age also may have brains that age more slowly,** suggests a small study published online June 7, 2018, by *Frontiers in Aging Neuroscience*.

**Foods that are like in properties with dosha (humor)** or dhatus (tissue elements) or mala (excrement), increase that particular Dosha, Dhatus or Mala. Similarly, foods opposite in properties decrease that particular Dosha, Dhatus or Mala e.g., eating Mamsa increasing Mamsa dhatus.

**Daily low-dose aspirin found to have no effect on healthy life span in older people** in a large NIH-funded study, which examined outcomes in United States and Australia.

**Excerpts from NIH:** In a large clinical trial to determine the risks and benefits of daily low-dose aspirin in healthy older adults without previous cardiovascular events, aspirin did not prolong healthy, independent living (life free of dementia or persistent physical disability). Risk of dying from a range of causes, including cancer and heart disease, varied and will require further analysis and additional follow-up of study participants. These initial findings from the ASPirin in Reducing Events in the Elderly (ASPREE) trial, partially supported by the National Institutes of Health (NIH), were published online on September 16, 2018 in three papers in *The New England Journal of Medicine*.

ASPREE is an international, randomized, double-blind, placebo-controlled trial that enrolled 19,114 older people (16,703 in Australia and 2,411 in the United States). The study began in 2010 and enrolled participants aged 70 and older; 65 was the minimum age of entry for African-American and Hispanic individuals in the United States because of their higher risk for dementia and cardiovascular disease. At study enrollment, ASPREE participants could not have dementia or a physical disability and had to be free of medical conditions requiring aspirin use. They were followed for an average of 4.7 years to determine outcomes.

"Clinical guidelines note the benefits of aspirin for preventing heart attacks and strokes in persons with vascular conditions such as coronary artery disease," said NIA Director Richard J. Hodes, M.D. "The concern has been uncertainty about whether aspirin is beneficial for otherwise healthy older people without those conditions. This study shows why it is so important to conduct this type of research, so that we can gain a fuller picture of aspirin's benefits and risks among healthy older persons."

In the total study population, treatment with 100 mg of low-dose aspirin per day did not affect survival free of dementia or disability. Among the people randomly assigned to take aspirin, 90.3% remained alive at the end of the treatment without persistent physical disability or dementia, compared with 90.5% of those taking a placebo. Rates of physical disability were similar, and rates of dementia were almost identical in both groups.

The group taking aspirin had an increased risk of death compared to the placebo group: 5.9% of participants taking aspirin and 5.2% taking placebo died during the study. This effect of aspirin has not been noted in previous studies; and caution is needed in interpreting this finding. The higher death rate in the aspirin-treated group was due primarily to a higher rate of cancer deaths. A small increase in new cancer cases was

reported in the group taking aspirin but the difference could have been due to chance.

The researchers also analyzed the ASPREE results to determine whether cardiovascular events took place. They found that the rates for major cardiovascular events—including coronary heart disease, nonfatal heart attacks and fatal and nonfatal ischemic stroke—were similar in the aspirin and the placebo groups. In the aspirin group, 448 people experienced cardiovascular events, compared with 474 people in the placebo group. Significant bleeding—a known risk of regular aspirin use—was also measured. The investigators noted that aspirin was associated with a significantly increased risk of bleeding, primarily in the gastrointestinal tract and brain. Clinically significant bleeding—hemorrhagic stroke, bleeding in the brain, gastrointestinal hemorrhages or hemorrhages at other sites that required transfusion or hospitalization—occurred in 361 people (3.8%) on aspirin and in 265 (2.7%) taking the placebo.

As would be expected in an older adult population, cancer was a common cause of death, and 50% of the people who died in the trial had some type of cancer. Heart disease and stroke accounted for 19% of the deaths and major bleeding for 5%.

**CMAAO PENANG RESOLUTION on Universal Health Coverage:** The right to health is now generally recognized as a fundamental Human Right by most countries. The Sustainable Development Goal (SDG) 3 mandates governments to "ensure healthy lives and promote well-being for all at all stages". Universal health coverage (UHC) means that all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship. (WHO)

The basis of a universal health coverage is primary healthcare ideally provided by team of health professionals and healthcare workers led by a family physician with the health needs of their patients and communities at the center. This team should be supported by other specialists and provides access to secondary and tertiary care as well as technical and social services. The funding of such a system can be provided by different means; including tax financing, private or social insurance or health savings accounts, out of pocket expenses or combinations of the above.

#### *Role of governments*

Governments should act on the Social Determinants of Health, by enabling a healthy start into life, decent

living conditions, quality education, safe and healthy environments including access to healthy nutrition and safe workplaces and transportation.

Regardless of the methodology chosen, the government should ensure that the patients can access timely, competent and quality healthcare services whenever they need it and without any financial hardship.

The access to healthcare includes the coverage of essential diagnostics, medications and devices; access to rehabilitation and palliation. The patient should have freedom of choice in the access, especially when it comes to selecting the primary care physician.

While the financing mechanisms may between nations and over time, the government should ensure that a transparent health system is always in place. Such system must cover every member of society and must not discriminate against those with congenital or pre-existing conditions. Payments and/or reimbursements to health institutions, health professionals and healthcare workers, must be fair and appropriate.

While disease patterns change from acute episodic illnesses to chronic processes, healthcare systems must not fall from one silo-structure to another. Universal Health Coverage requires a universal or holistic approach to patients understanding them as persons in their families, groups and communities.

Thus, the role of the physicians extends to be an advocate for healthy living conditions, healthy lifestyles and wellness of all members of the communities. Attentions should be directed to the Social Determinants of Health as well as to identifiable causes of illness, injury and disease; and to general health promotion, health education and specific prevention.

#### **Role of NMAs**

NMAs should promote UHC by explaining to their physicians the benefit of UHC for their patients and communities and to encourage the leadership role their physicians should take to make this possible.

NMAs should analyze current and foreseeable health demands of the people and thereafter target appropriate educational programs for health professionals on prevention, health promotion and nutrition.

NMAs should reach out to politicians, the media and other influencers to advocate for Universal Health Care and to explain that expenditure for healthcare is not just a cost, but an investment in the future of every society.

**The hip implant class action lawsuit against the pharma major Johnson and Johnson in the US, began in 2011:** Two years later, in 2013, the firm agreed to pay

an estimated \$2.5 billion to settle thousands of lawsuits from affected patients. A petition has been filed by 52-year-old Jyoti Sharma, who moved the National Consumer Disputes Redressal Commission (NCDRC) in 2016 suing Johnson & Johnson for Rs. 2 crore in damages. Sharma underwent a hip replacement surgery in New Delhi in September 2006. She claims she visited the hospital on multiple occasions complaining of pain but wasn't informed about the global recall.

Early 2011, when her doctor advised her to undergo tests to determine the cobalt-chromium level in the blood, they found that her cobalt levels were as high as 3.69 (the normal range is between 0.08 and 0.09). She says she was first informed of the global recall in March 2012 after which, in June 2012, her implant was removed and she underwent a revision hip replacement surgery. When the pain persisted, she moved court.

**Continuous calorie restriction group:** 1200 to 1500 kcal a day (30% protein, 45% carbohydrate and 25% fat), for a total of 10,300 kcal a week.

**Intermittent-fasting group:** 500 to 600 kcal a day (including a minimum of 50 g of protein) on two consecutive or nonconsecutive days of the week, and to consume their usual diet on the other 5 days, for a total of 11,500 kcal a week.

#### **Levels of immunosuppression associated with inflammatory bowel disease (IBD) treatment regimens**

- ➲ **Low-level immunosuppression:** Lower daily doses of corticosteroids than those in high-level immunosuppression for more than 14 days: Methotrexate (0.4 mg/kg/week), azathioprine (<3.0 mg/kg/day), or mercaptopurine (<1.5 mg/kg/day).

#### **High-level immunosuppression**

- ➲ Glucocorticoids (prednisone >20 mg/day for at least 2 weeks and within 3 months of stopping therapy).
- ➲ 6-mercaptopurine, azathioprine or methotrexate at doses higher than those associated with low-level immunosuppression or discontinuation within 3 months.
- ➲ Adalimumab, certolizumab pegol, golimumab, infliximab, natalizumab or vedolizumab, or discontinuation within 3 months.

#### **Inactivated vaccines for patients with IBD**

- ➲ **Influenza:** All patients with IBD should be vaccinated seasonally with the intramuscular/intradermal inactivated influenza vaccine prior to starting immunosuppressive therapy.
- ➲ **Pneumococcal pneumonia:** All patients with IBD should be vaccinated once with the PCV13

followed by the PPSV23 (first dose after 8 weeks if immunocompromised, or after  $\geq 1$  year if immunocompetent; second dose after 5 years; and third dose after 65 years of age). If previously vaccinated with the PPSV23, then the PCV13 should be administered at least 1 year after the PPSV23 in both immunocompromised and immunocompetent adults.

- ⦿ Hepatitis A: Check hepatitis A immune status at the patient's initial visit. If nonimmune to hepatitis A, vaccinate the patient with a 2-dose series (0 months and 6-12 months).
- ⦿ Hepatitis B: Check hepatitis B immune status at the patient's initial visit. If nonimmune to hepatitis B, vaccinate the patient with a 3-dose series (0 months, and 1 and 6 months after first dose) and recheck titres 1 to 2 months after last vaccination. If the patient remains nonimmune, offer booster with a double dose of hepatitis B vaccine or offer combined hepatitis A/B vaccination.
- ⦿ Human papilloma virus: All male and female IBD patients between the ages of 11 and 26 years should be vaccinated with the human papilloma virus vaccine.
- ⦿ Meningococcal disease: Patients with IBD should be vaccinated with the meningococcal vaccine according to standard Advisory Committee on Immunization Practices (ACIP) recommendations for the general population.
- ⦿ Tetanus, diphtheria, and pertussis: All patients with IBD should be vaccinated with Td every 10 years. TDap should be substituted once for the Td vaccine to provide additional coverage for pertussis.

#### Live vaccinations for patients with IBD

- ⦿ Measles, mumps, rubella (MMR): Vaccinate all nonimmune patients with the MMR vaccine as long as they have not been on immunosuppressive therapy within the previous 3 months and there are no plans to start immunosuppressive therapy within the next 6 weeks.
- ⦿ Varicella zoster: Vaccinate all nonimmune patients with the varicella zoster vaccine as long as they have not been on immunosuppressive therapy within the previous 3 months and there are no plans to start immunosuppressive therapy within the next 6 weeks.
- ⦿ Herpes zoster: Vaccinate all patients over the age of 60 years with the herpes zoster vaccine. Vaccination is safe in patients on low-dose immunosuppression but contraindicated in patients on biologic therapy

or on corticosteroids. Do not vaccinate patients on high-dose immunosuppressive therapy within the past 3 months or who plan to start high-dose immunosuppressive therapy within the next 6 weeks.

#### **Depression is prevalent globally and now resistance exercises have been advised, if you have depression.**

A study published in the June issue of *JAMA Psychiatry* has found that people with mild-to-moderate depression who performed resistance training two or more days a week saw "significant" reductions in their symptoms, compared with people who did not. The findings also suggested that resistance exercises may be even more beneficial for those with more severe depressive symptoms.

**There is good news for patients with polycystic kidney disease,** one of the leading causes of kidney failure. So far, there has been no cure. But for the first time, there is hope: tolvaptan now has been approved by US FDA. It blocks the thirst hormone, vasopressin and blocks the cyst from forming more fluids.

**Good news for grass root healthcare workers:** The Cabinet Committee on Economic Affairs, chaired by the Prime Minister Shri Narendra Modi has approved enhancement of Honorarium to Anganwadi Workers (AWWs) and Anganwadi Helpers (AWHs) and Performance Linked Incentive to AWHs Under Anganwadi Services (Umbrella ICDS Scheme).

**Watch out for pollution news:** Research focused on long-term health problems after exposure to pollution will be in the spotlight at the upcoming European Respiratory Society International Congress 2018.

**Some tips for GPs:** Botox can help people who have trouble speaking clearly after a stroke and the evidence does not support the use of aspirin as monotherapy for the prevention of thromboembolic events in patients with atrial fibrillation. A baby born in Southern Asia is 9 times more likely to die in the first month than a baby born in a high-income country.

**Countries need to urgently accelerate their response to end tuberculosis (TB),** including drug-resistant TB. Fewer people fell ill and died from TB last year but countries are still not doing enough to end TB by 2030, warns the WHO in its 2018 Global TB Report. Although global efforts have averted an estimated 54 million TB deaths since 2000, TB remains the world's deadliest infectious disease.

Power cuts are common in many Asian countries. **Do you know that if there is a power cut for >4 hours then** all perishable foods including meat, poultry, fish,

eggs and left overs in your refrigerator needs to be discarded. It may be one reason of high number of food poisoning cases seen in these countries.

**Asian medical professionals need to be concerned about Rabies**, which is estimated to cause 59,000 human deaths annually in over 150 countries, with 95% of cases occurring in Africa and Asia. Due to widespread underreporting and uncertain estimates, it is likely that this number is a gross underestimate of the true burden of disease. Ninety-nine percent of rabies cases are dog-mediated and the burden of disease is disproportionately borne by rural poor populations, with approximately half of cases attributable to children under 15.

#### How do we read the food labels and what do they mean in terms of sodium content?

Let us have a look at them.

- ⦿ Sodium-free or salt-free: Less than 5 mg sodium per serving.
- ⦿ Very low sodium: Less than 35 mg sodium per serving.
- ⦿ Low sodium: Less than 140 mg sodium per serving.
- ⦿ Light in sodium: At least 50% less sodium than original product.
- ⦿ Reduced sodium: At least 25% less sodium than original product.
- ⦿ Too much salt: The average adult eats about 3,400 mg of sodium per day, which is far more than the recommended daily goal of 2,300 mg.

The Heart Care Foundation of India (HCFI) recommends an even lower goal: no more than 1,500 mg per day, especially for those with high BP or heart disease.

**Many of us are on a low carb diet:** For short-term, this is okay, but not in the long run. Dietary Guidelines for Americans recommends that carbohydrates make up 45-65% of total daily calories. I recommend fasting with a fruit diet once a week.

**If you are an alcohol lover read this:** In August of 2018, two larger studies examined the impact of alcohol. The first one, published in *The Lancet*, included only people who drank at least some alcohol. It concluded that common recommendations regarding "moderate" drinking (one drink a day or less for women, and two drinks per day or less for men) might be too much. The second study, also published in *The Lancet*, was even bigger. It examined data from hundreds of studies and other sources (including sales of alcohol, home-brewed alcoholic beverage consumption, and even estimates of tourist consumption) in 195 locations. It concluded that the best option for overall health was no drinking at all.

Of note, the definition of "a drink" in this study was 10 g of alcohol - that's 30% less than a standard drink in the US, but 25% more than a standard drink in the UK.

**Loneliness an epidemic of the modern age:** Nearly half of Americans say that they feel lonely most or even all of the time, and it isn't just a detriment to their social lives and happiness; loneliness is bad for their health. Large number of studies have found strong links between loneliness and disease from cardiovascular disease to stroke and even death on the whole.

Scientists have observed an uptick in activity and chaos in the amygdala, which regulates emotions and emotional responses. Similarly, the dorsal posterior insula, which regulates how painful something feels actually becomes more active when we are lonely, so injuries - which, incidentally, happen more often to people who are socially isolated - actually hurt more.

Cortisol is the fight or flee hormone. But our bodies are not designed to be under constant stress, and cortisol is known to disrupt nearly every biological process when our levels of it are too high. The antidote to high cortisol quotients is oxytocin. And oxytocin production ramps up to reward our social interactions specifically. Oxytocin is the social and the love hormone and is responsible for the pleasant 'warm' feelings we get from spending time around friends and loved ones. Maintaining a balance between the stress and social hormones is the key.

Another endocrine chemical, 'brain derived neurotrophic factor (BDNF)' helps the brain to remain plastic, or flexible, so that we can continue to hold on to past memories and create new ones.

Socially isolated people, however, have a shortage of this substance, too. If you don't have one, make one friend today.

**Good news - European Parliament adopts resolution to curb antimicrobial resistance:** The growing threat posed by antibiotic-resistant bacteria can only be tackled through a holistic 'One Health' approach, Members of European Parliament (MEPs) have said. Many countries including India have done in the past.

**Health Ministry has launched sputum sample transportation through Dept. of Post** for diagnosis of TB. The pilot project starts in Karawal Nagar in Delhi. Now more people can get tested followed by appropriate management and reduced disease transmission.

**Scientists have identified at least four new distinct personality types** - average, reserved, self-centred and role model - after sifting through data from over 1.5 million people across the globe. **Which one are you?** (*Nature Human Behaviour*).