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Subject: Validity of downloaded Aadhaar (e-Aadhaar) as Proof of identity— regarding.

The Unique Identification Authority of India (UIDAI) is a statutory body under Section 11 of the Aadhaar (Targeted Delivery of Financial and other Subsidies, Benefits & Services) Act, 2016 (Aadhaar Act, 2016) which came into force on 12.09.2016. The UIDAI is mandated to issue 12 digit Unique Identification number called Aadhaar to the residents based on demographic and biometric information submitted by them to the UIDAI during enrollment. Aadhaar number is communicated to the resident in physical form (Aadhaar letter) by post. UIDAI also provides facility to download Aadhaar in electronic form (Downloaded Aadhaar or e-Aadhaar) on its website (https://uidai.gov.in/).

2. UIDAI is receiving requests from various organisations/individual residents seeking clarification on validity of downloaded Aadhaar (e-Aadhaar) as various authorities are not accepting downloaded Aadhaar. This circular is being issued to clarify the validity of downloaded Aadhaar (e-Aadhaar).

3. As per Section 4(3) of Aadhaar Act, 2016:

   "An Aadhaar number, in physical or electronic form subject to authentication and other conditions, as may be specified by regulations, may be accepted as proof of identity of the Aadhaar number holder for any purpose”.

[Explanations— For the purposes of this subsection, the expression “electronic form” shall have the same meaning as assigned to it in clause (r) of sub-section (i) of section 2 of the Information Technology Act, 2000].

4. Further, as per Regulation 15 (1) of the Aadhaar (Enrolment and Update) Regulations, 2016:

   The Aadhaar number may be communicated to residents in physical form (including letters or cards) and/or electronic form.

5. It is informed that downloaded Aadhaar (e-Aadhaar) carries Name, Address, Gender, Photo and Date of Birth details of the Aadhaar holder in similar form as in Printed Aadhaar letter. The downloaded Aadhaar also contains date of Aadhaar generation and date of Aadhaar download. The downloaded Aadhaar (e-Aadhaar) is a digitally signed document by UIDAI as per IT Act, 2000 which provides for legal recognition of electronic records with digital signatures.

6. Downloaded Aadhaar (e-Aadhaar) is, therefore, as legally valid proof of identity under Section 4(3) of the Aadhaar Act, 2016 read together with Regulation 15 (1) of the Aadhaar (Enrolment and Update) Regulations, 2016, as printed version of Aadhaar Letter.

7. It is, therefore, clarified that, Downloaded Aadhaar (e-Aadhaar) is a valid and secure electronic document which should be treated at par with printed Aadhaar letter. Ministries/Departments/State Governments/agencies accepting printed Aadhaar as proof of identity are hereby required to accept downloaded Aadhaar (e-Aadhaar) also as a proof of identity and not to discriminate it vis-a-vis printed Aadhaar.

8. This issues with the approval of CEO, UIDAI.

Copy to:

1. Secretaries to the Government of India, All Ministries/Departments of Government of India.
2. All Chief Secretaries to the State Government/Union Territories.
3. All DGs of UIDAI HQ and ROs.
4. UIDAI Webmaster, Website.
India, they say, is full of contradictions. Here is one: 60% of our energy comes from coal, and we are the world’s third-largest producer of greenhouse gases, but we are also among the world leaders in clean energy. The share of renewables (solar, wind and hydropower) is increasing rapidly, thanks to new technologies, booming investment and government incentives such as subsidies and tax breaks.

Installed solar power generation capacity in India has increased from 160 MW in 2010 to 3700 MW in 2015 to 26,000 MW today. The government aims to reach 1 lakh MW by 2022. Several large solar plants are operational, with capacities in the 600-1000 MW range. Under-construction projects are even bigger: the Pavagada project in Karnataka (600 MW installed, will expand to 2000 MW by 2020) and Bhadla Solar Park in Rajasthan (745 MW installed, 2250 MW by 2019).

We have other innovations too. The Saibaba shrine in Shirdi has the world’s largest solar heating system, which cooks 50,000 meals per day for pilgrims. It uses solar reflectors to produce hot water or steam, different from solar panels, which use photovoltaic cells to convert sunlight to electricity. We even have floating solar power plants like the 500 kW plant that floats on the surface of the Banasura Sagar reservoir in Kerala. These numbers refer to ‘official’ power, flowing through the national grid. Solar power plants and large rooftop panel systems are connected to the national grid. But there is also off-grid solar: solar panels that are not grid-connected (e.g. in individual homes) and a range of solar-powered devices such as lanterns, cookers, street lamps and irrigation pumps.

Reaching for the sun

Solar energy has the power to transform the country. It’s not just about reducing fossil fuel consumption or protecting the environment. Solar can be produced at very small scale and distributed locally without expensive infrastructure. That makes it ideal not only for cities but also for remote areas – modest home-lighting systems, tube lights in the village chaupal, or solar-powered tube wells for farmers. We have reached ‘grid parity’, the point at which solar power costs the same as conventional power.

In fact, according to recent estimates, solar in India is about 18% cheaper than conventional. Even if this is too optimistic (because of hidden subsidies or differences in technical parameters), prices are at least comparable. That means solar will grow even faster in the future provided manufacturers can keep pace with demand.

How has solar grown so quickly? Most of India, with hot days and clear skies, is well suited for solar power generation. The cost of solar panels has fallen sharply. Government subsidies have encouraged users to refer to clean energy. The share of renewables (solar, wind and hydropower) is increasing rapidly, thanks to new technologies, booming investment and government incentives such as subsidies and tax breaks.

While large-scale solar has taken off, rooftop solar has not. Countrywide, less than 3 GW has been installed, compared to the target of 40 GW by 2022 – and most of this is in factories or large commercial buildings, not residences. Mumbai, for example, could potentially generate 1.72 GW from rooftop solar, but only 5 MW has been installed in residential buildings. There are many reasons for this: lack of awareness, resistance from electricity distribution companies (which would incur huge losses if customers move to solar), bureaucratic red tape (approvals, certifications, delayed payment of subsidy) and lack of a proper system for net metering, which allows you to sell surplus electricity back to the government. There are practical difficulties as well – water tanks may occupy a large part of the rooftop, leaving too little space for solar panels. Savings can be substantial, but so is the initial investment. Rooftop solar costs Rs 50,000 to Rs 1 lakh per kilowatt to install, depending on the supplier. Fortunately, subsidies are available. The Maharashtra government offers a 30% subsidy for rooftop solar systems that are connected to the grid (not for stand-alone systems). Residential buildings, schools, colleges, hospitals, are all eligible for the subsidy.

What can you do, as a concerned and environmentally conscious citizen? First, do your homework. What is my electricity bill, how long to recover the cost (usually 4-5 years), is it technically feasible (how much space is available, am I surrounded by tall buildings that block out sunlight)? Then talk to your neighbors, and contact a reputable supplier who can install the system and guide you through the paperwork. We at the CGSI have installed solar panels and have connected it to the grid. It has brought down our electricity cost. We have also made a short film about it. Anyone can ask us for advice. The 30% subsidy is available only until May 2019. So act now. Say hello to solar – or in other words, perform the modern equivalent of surya namaskar.
Thanks for resolving my issue with Tata Sky, with only contacting you by e-mail. I have already received the appropriate response from Tata Sky and the amount deducted from the account given back to me. My Tata Sky is now working properly.

I think the problem is resolved only because of CGSI efforts and Tata Sky has expressed regret about it and agreed to give good service. I am certainly looking forward to good service from them. I give my heartfelt thanks to your efforts. Thanks again.

Narendra Sadaashiv Kharade.

Defective shirt – ZARA: Many thanks for your reassurance CGSI and extremely fruitful interactions with your Dr. Kamath on many occasions. I trust that Inditex will behave more responsibly than has been the case with my first shocking experience of stonewalling, obfuscation and refusal to co-operate on my complaint in any way whatsoever.

Umesh Solanki

We all know that BEST was charging us TDLR in our electric bills for years, and then finally the High Court issued directive that they cannot charge it and should refund it. Instead, they have now started applying Wheeling Charges and not given a single rupee refund under TDLR. How can we get them to refund us the amount immediately? If the consumer is late in payment they charge interest, hence, we should also get this money back with interest.

I shall request CGSI to file a petition and take up this matter with BEST and concerned authorities to refund us the TDLR amount and explain what wheeling charges are being charged for.

Rajiv Kedia (CGSI Life Member 1620) 9820062128

My Complaint about Van Heusen (Aditya Birla Fashion & Retail Limited) Shirt and Trouser purchased from Planet Fashion, Dombivili.

I really appreciate your kindness and support. You inspired me during a difficult time when I needed words of encouragement. You do not even know how much your help meant to me. You are doing a great job. We all Indians are proud to have such a wonderful officials. Hope you get more and more achievements in your career. Thanks a lot for helping me out. With regards,

Viral Vinod Chheda

Complaint about Chicco India product: The First Cry store NIBM store, Pune

This to inform you all, that finally, the product has been returned and we have received the refund.

CGSI Consumer Helpline Team - Thanks a ton for your support. Much appreciated :) Thanks,

Pooja Nair

<table>
<thead>
<tr>
<th>MILK SAMPLES TESTED BY CGSI (Jan – Oct 2018)</th>
<th>TOTAL</th>
<th>%</th>
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<tbody>
<tr>
<td>TOTAL MILK SAMPLES</td>
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<tr>
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This is a brief collated conclusive report of the tests CGSI carried out on milk samples bought by consumers. CGSI tested milk samples to find out as to whether it complies with the FSSAI standards and the results analyzed.


CONCLUSION: 78.12% Milk available in open market, purchased/sampled by consumers and tested by CGSI does not comply with FSSAI standards.
The laundry washing of clothes is a vital task performed daily in every household across the globe. People today buy more clothes and wash them more often than they did earlier. According to the data released by Ministry of Textiles, the per capita consumption of textiles recorded a growth of 4.98% from FY 2011 to FY 2012. The increased penetration of fully automatic washing machines and a simple budge from bar-soaps to more sophisticated matic detergents is a small but a significant indicator of India’s consumer revolution (Dupont, 2013). This increase in consumption pattern and radical shift in the life styles are not only exploiting the environment but also exerting a great pressure on World’s finite resources.

According to the World Bank Report (2008), approximately 5% of an average household’s electricity was consumed for washing clothes with a corresponding energy consumption of 672 GWh with an average per unit consumption of 40.7 kWh. In addition, 3.175 million tonnes of detergent and approximately 144 million cubic meters of water are used annually for laundry care in India.

These figures provided the rationale for a scientific research study on developing green ways of doing laundry in India. The study was funded by University Grant Commission (UGC) and carried under the aegis of Department of Fabric and Apparel Science, Lady Irwin College, University of Delhi. Laboratory-based tests measuring cleaning effect, energy and water consumption were performed in order to find out the most sustainable way of doing laundry at household level without compromising the cleaning efficiency.

The significant results of the study have been summarized below as eight green laundry tips for doing laundry in India. These guidelines will not only help the consumers to contribute positively to the ecology but at the same time will also help them to save their annual household economic expenditures.

### Cosmetics affect hormones

Scientists have discovered that certain chemicals widely used in cosmetics and personal care products could contribute to changes in reproductive hormones. The study published by George Mason University Assistant Professor of Global Community and Health Virginia, Anna Pollack, tested chemicals including parabens and benzophenones to identify their contribution to hormonal changes.

Parabens often used as preservatives in cosmetic products, while benzophenones are used to protect products from UV light and can be found in sunscreens, fragrances, shampoos and conditioners. This study is the first to examine mixtures of chemicals that are widely used in personal care products in relation to hormones in healthy, reproductive-age women, using multiple measure of exposure across the menstrual cycle, which improved upon research that relied on one or two measures of chemicals. Certain chemicals and UV filters were associated with decreased hormone levels, while others increase them.

“Providing results of a study on the effects of chemicals, Prof. Pollack added.

Avoid frequent washing: Not all the garments require washing on daily basis. When clothes smell a little, it may be sufficient to hang them on a line in fresh air for a while or wash them using only water.

Wash only full loads: When the machine is only half filled, it still uses 94% of the energy, 74% of the water, 67% of the detergent as compared with a full machine.

Choose a sustainable washer technology: Various scientific research studies across the globe have found that a Horizontal axis (usually front load) washing machine consumes 63% less water, 33% less detergent and causes less wear and tear to the garments as compared to Vertical axis (usually top load) washing machine.

Choose low temperature and long wash cycle: When clothes are only slightly soiled a wash at low temperature (e.g., 30°C) for a longer period of time may already provide sufficient cleaning result and may save approximately 36% energy. For high temperature washing, wash during the day.

Use eco-friendly laundry detergents: Laundry detergents may contain chemicals, which are otherwise harmful to the environment. Eco-labeled detergents are certified for their environmental friendliness.

Use correct detergent dosage: Follow detergent dosage instructions on labels. Overdosing does not provide extra cleaning and uses more water for rinsing and under-dosing will not result in clean garments.

Dry under the sun: Spin dry your garments followed by line drying under the sun/shade. Sunlight also kills germs.

Use the wastewater from rinse cycles for non-potable uses like toilet flushing, car washing etc.

### Food adulteration offenders in state may get life in jail

In a bid to curb food adulteration, the Maharashtra government plans to make the harmful practice a non-bailable offence and increase jail term up to life imprisonment for offenders. Girish Bapat, Food and Drug Administration (FDA) minister said the state government would introduce a law regarding this matter.

Responding to a calling attention notice by Ashok Jagtap over milk adulteration in and around Mumbai, Bapat said, “The government is committed to stopping the malpractice.” He said the amendments to the Prevention of Food Adulteration (Maharashtra Amendment) Act would be tabled in the House during the on-going winter session of state legislature. Jagtap, a Congress legislator, said that between the collection points of milk and the distribution centers, it turns “poisonous”, “endangering lives of consumers from children to elderly.” Bapat said that a bill to amend sections 272 to 276 of the Act would be brought in.

“The Indian Penal Code (IPC) is silent on it [adulteration]. The current law is weak. Amendments need to be made and we are bringing in a bill for that. Apart from making the offence non-bailable, the law will also provide for life-imprisonment to the guilty depending on the severity of the offence,” Bapat said. Currently, those found guilty of food adulteration could face imprisonment of six months, and a fine of ₹1,000. Meanwhile, Hemant Tinkle from the Nationalist Congress Party questioned the minister regarding the state government having an expert agency or laboratory to test samples in order to curb the malpractices.

“Unfortunately, research is not given priority. However, we are trying to get instant test kits, where people can test the milk by dipping a strip in it. At this point, these strips are costly, around ₹120150, and we are trying to get them at lower rates,” Bapat said.

(Courtesy: Hindustan times)
Natural Disaster or Man-made Calamity?
Shiva’s Locks & Floods - Ancient Parable Retold By Narendra G. Wagle, Ex-President & Life Member (CGSI)

According to Hindu mythology, King Bhagirath implored Goddess Ganga to come down to earth and thus wash away the sins of his forefathers. To arrest the force of the waters, Lord Shiva was entreated by the King through penance and prayer. The Lord agreed and Ganga descended into His hair wherefrom the river water trickled out to give life and sustenance to the vast plains of Northern India. This is the story of Gangadhar in the minds of a billion Indians. But now, Shiva’s locks (symbolised by the Himalayan forests) have been remorselessly cut resulting in the sacred river Ganga gushing down with all its unrestrained fury causing death and destruction which was the apprehension of King Bhagirath in times of yore.

Five years ago in mid-2013, Uttarakhand at the Himalayan foothills suffered heavy loss of life and property consequent to severe floods and massive landslides (which are occurring every year). Now, it is unfortunately Kerala’s turn. Land is acquired for agriculture, road widening in urban towns and cities, construction of highways and expressways through rural areas, for buildings, transportation (metro railways, airports), and industrial projects (e.g., oil refining or petrochemical plants). Quarrying of river sand, mining (maybe done illegally) underground or by chopping hills as is the common practice in Goa for generations (thus predicted to be next on the list?) and deforestation without let or hindrance. Nature will react as it has done with floods as retribution.

**Population Pressure (Indian context)**

The main problem is population explosion from one billion at the beginning of this millennium to an additional 350 million in less than 20 years. People will need more food, shelter, basic needs such as healthcare, communication, clothing, et al. Unemployment, poverty and deprivation are inevitable concomitants of the impact of population which are closely interrelated factors breeding on one another.

There is a lot of breast-beating over the damage to the environment by indiscriminate deforestation in large parts of the country. It is, however, forgotten that the man-environment system is closely linked to the socio-economic system; as human activities expand ecological imbalance sets in. To the vast populace, including politicians and decision makers, conservation is an esoteric concept looked upon as hindrance to ‘development’. As people proliferate, natural resources are destroyed for housing, agriculture, grazing and firewood.

**Man-nature conflict**

Overpopulation means mass unemployment unless industrial growth keeps pace with increasing numbers. But then, industrialisation has become synonymous with pollution whether it’s manufacture of basic chemicals (drugs, pesticides or fertilisers), or production of nuclear energy, thermal power, even cotton textiles and synthetic fibres.

Every human activity results in defilement. The fallout of use and abuse of resources and their manifestations will effectively further aggravate ‘pollution of poverty’ (sequel of slums or the jhuggi jhopdi scenario) vs. ‘pollution of plenty’ (over-consumption). Economic progress receives a setback.

World Population Day is observed on July 11. There are some who question the idea that ‘over-population’ really exists. “Is there an objectively measurable carrying capacity of this planet? they ask. How is ‘too many people’ defined? Are people a resource or burden? Hands to work or mouths to feed, is the rhetoric.

**Why population matters: Key reasons**

It took all of history up to the early 1800s for world population to reach one billion people which was the number of Indians prevailing in 2000. The world gains this figure every ten years! Imagine how better off the world - India included - would have been if population had stabilised and universal access to the information and means to plan families had been achieved 50 years ago. Health services, gainful employment, food housing, safe drinking water, sanitation (“Swachh Bharat”), a clean and secure environment, these are the missed opportunities by the present generation. We can spare our children the trauma of short-term social/civil conflicts (rape and murder) with long-term global disputes arising from overcrowding and scarcities of natural resources.

Population pressures are an important factor contributing to migration (across national borders and rural-urban boundaries). Developed countries exhort to placing entry barriers, visa restrictions and forcible deportation of “unwanted” immigrants. The growth of urban conglomerates has produced concentrations of human population of unprecedented magnitude and governments are failing to manage the resulting environmental and social service problems particularly of relocation in terms of jobs and housing. The currency crash in Venezuela brewing since 2010 has created a crisis in all spheres with deterioration of productivity in agriculture and manufacture, so no job opportunities followed by unemployment, compounded with housing, food and medicine shortages. A flourishing oil economy shattered! Exodus of people began in 2015 and more than two million or 7 per cent of population fled to neighbouring countries where they are not welcome; in fact forcibly evicted.

Fresh water is a finite resource and is insufficient to meet the needs of a burgeoning population in future and no technology in sight can fill the gap. But water can also be lethal in situations faced by many states across the country. Homes suddenly vanished into an abyss, deep fissures on roads with bridges collapsing, trees uprooted, people and livestock washed away. There are reports of similar happenings in many Asian countries including Japan and China. Calamities and catastrophes strike anywhere anytime without signalling a warning.

World Health Organisation’s Human Reproduction Programme had contemplated to develop an immunological contraceptive (anti-fertility ‘vaccine’). This was opposed by health activists “because it threatens people’s reproductive self-determination, particularly that of women in Third World countries for whom it is being developed”. The matter ended there more than two decades ago in the name of a “consumer right to choose”. But whose responsibility is it to regulate unbridled fecundity. The Indian government’s (in contrast to China’s) priority level of population control or better worded ‘management’, is low in the face of other pressing issues. So be it.

A woman had eight children, all of them boys. Therefore, a local community magazine sent a journalist to her house for an interview. The journalist asked her all about the boys. What their names were? She proudly said ‘Salman’.

‘Right’, he said, ‘What about that blonde one over there?’ ‘Salman’, she said.

‘Oh, what is the name of the tall boy with freckles?’ ‘Salman’, she said. ‘Well, the chubby one with baseball cap?’ ‘Salman’, she said.

‘Are all your boys called Salman?’ he asked, ‘Isn’t that terribly complicated?’

‘Not at all’, she said, ‘It makes everything very easy, actually. When I shout: Salman, tea is ready! They all come. When I say, Salman, it is time for bed! They all go to bed.’

‘I see. But what if you want only one of them?’ ‘No problem.’ she answers. ‘Then I call them by their surnames.’

Keemat: January – February 2019
MUMBAI: Most table salts sold in India are likely to contain microplastics from polluted seawater, a first-of-its-kind study for the country by the Indian Institute of Technology-Bombay (IIT-B) has revealed. A two-member team from the institute’s Centre for Environmental Science and Engineering (CESE) found a total of 626 micro plastic particles across samples (totalling 24 kg) of eight popular Indian salt brands included in the study, of which 63% comprised plastic fragments and 37% were plastic fibres. Researchers said the study has not named individual brands because micro plastic was found as a result of background sea pollution, and not during the process of extraction or manufacturing salt.

The US-National Oceanic and Atmospheric Administration (NOAA) classifies micro plastics as measuring less than 5 millimetres, or the size of a sesame seed. They are generated when large plastic debris accumulated in the ocean degrades into tiny fragments. Microfibers, or tiny synthetic fibres, are mainly released from clothes while washing. Both micro plastics and microfibers, national and international studies show, enter our food chain through seafood and now, possibly, salt. According to a 2014 study published in a Public Library of Science journal, there are more than five trillion pieces of plastic floating in the world’s oceans. Scientists worldwide have recorded the presence of micro plastics in sea salt in various countries.

The India-specific study is important because India is the third-largest producer of edible and industrial salt (26 million metric tonne in 2017) after China (68 million tonne in 2017) and the United States (43 million tonne in 2017). “Our results further confirm the global presence of micro plastics in the sea-derived salts as reported from different parts of the world,” said Professor Amrithanshu Shriwastav, co-investigator, CESE. “This is the first report, with reasonable approximations, of the mass concentration of micro plastics in sea-derived salts,” Shriwastav said. “The extensive dietary consumption of these Indian sea salts in multiple countries exposes a significant international population to the associated health effects of micro plastic ingestion.”

The study ‘Contamination of Indian sea salts with micro plastics and a potential prevention strategy’ co-authored by Shriwastav and Chandan Krishna Seth was published in Environmental Science and Pollution Research, an international peer-reviewed journal, on August 25. “This (IIT-B study) is a first, and an interesting study,” said Madhavan Nair Rajeevan, secretary, ministry of earth sciences. The National Centre for Coastal Research and National Institute of Ocean Technology are spearheading a project to assess and manage sea pollution in India, he added. “Majority of the plastic enters the sea via rivers and estuaries, and micro plastic is a bigger problem. We have started discussions on assessing the source of plastic that lands into the sea and will soon begin the project.”

The World Health Organisation guidelines recommend an intake of up to 5 gm salt per day for adults. With 63.76 micrograms (0.063 milligrams) of micro plastics per kilogram of salt as estimated in the IIT-B study, the maximum micro plastic ingestion for Indians is estimated to be approximately 117 micrograms (0.117 milligrams) every year. Researchers said while the effects on health with an annual dose of 117 micrograms of micro plastics in sea salt is yet to be established, studies have shown micro plastic contamination in sea food, and their ingestion via inhalation. Therefore, they said that the aggregate human intake of micro plastics from different sources is expected to be higher, and calls for a comprehensive exposure and risk assessment.

Governments across the globe don’t have any standards on safe threshold for plastic in water and food, according to a 2017 report by Orb Media that said micro plastics have been shown to absorb toxic chemicals linked to illnesses, and then release them when consumed by fish and mammals. For the IIT-B study, three packages each of eight commercial brands of sea salt – of which one brand comprised open sea salt – was obtained from supermarkets and local markets across Mumbai between June and September 2017. All 24 packages (of 1 kg each) sported different lot numbers and manufacturing dates between 2016 and 2017. Salt from six brands were produced in Gujarat – it accounts for about 77% of the country’s production – while the remaining two were from Kerala and Maharashtra.

An analysis of the samples showed that 80% of the micro plastic fibres and fragments were smaller than 2000 micrometres (2 millimetres) and 500 micrometres (0.5 millimetres) respectively. Fibres larger than 5 millimetres, though less in number, were also found. At 61%, polyesters were dominant in both micro plastic fragments and fibres, followed by polyethylene (22%) and polyamide (16%). Of all fragments that were extracted during the study, 74% particles comprised of polyesters including polyethylene terephthalate (PET) followed by polyethylene (19% particles), polyamide (7%) and polystyrene (less than 1%). As for microfibers, 39% consisted of polyesters of which 18% was PET, 34% polyamide and 28% polyethylene. PET is widely used in the manufacture of plastic bottles and containers for packing food, mineral water, beverages, personal care products and flexible films. Polyesters and polyamide are used in the textile industry. Polyethylene and polystyrene polymers are predominantly used in the packaging industry.

Over the last four years, micro plastics and microfibers in sea-derived salt have been found in China, Spain, Turkey, UK, France, US, as well as in 17 brands of salt from Australia, France, Iran, Japan, Malaysia, New Zealand, Portugal and South Africa that were bought from a Malaysian market. The number of micro plastic particles found in Indian salts was similar to that in salts from Spain and Turkey, but lower than those in China. To prevent or reduce the transfer of micro plastics into sea salt, the researchers demonstrated what they described as simple sand filtration of artificially contaminated seawater. “We managed to eliminate more than 85% micro plastics by weight and more than 90% of the particles that has the potential to lower their overall burden on human health through experiments conducted in our laboratory. The next step will be to test our method on a large scale by collaborating with industry,” said Shriwastav.

FOUR THINGS YOU SHOULD KNOW ABOUT INDIA POST PAYMENTS BANK

Deposit: The maximum balance allowed for all accounts is ₹1 lakh. For digital savings account, the total cumulative credit permissible is ₹2 lakh within a year. Amount above ₹1 lakh will be deposited in the linked post office savings account (POSA). In case you do not have POSA, the system will not accept deposits above ₹1 lakh. Annual interest rate is 4%, paid out quarterly

Eligibility: To open a regular and basic savings accounts, you should be above 10 years with know-your customer (KYC) documents. For digital savings accounts, you should be 18 years and above with KYC.

Minimum balance: No accounts have a minimum balance, but current account has monthly average balance requirement of ₹1,000.

Charges: The savings accounts charge ₹50 for services such as issuing a balance certificate, return of card/kit due to wrong address or for QR (quick response) card re-issuance among other respective charges.
Insurance is the only scientific method of ensuring recovery from disasters, at least in terms of the economic value of the assets lost, but it is a very lengthy process for Insurance Claim Process & Filing Insurance Claim, claim many people. Any person holding policies such as the householder’s policy, house policy, motor policy, etc., may hope to get adequate compensation by way of claims settlement. However, the process is not as simple as one expects it to be on the basis of the face value of the policy. The policyholder has to be very cautious and careful while lodging the claim with the insurer.

Submit details for claims

As soon as the flood recedes, the policyholder has to get hold of his policy document. If the document is not retrievable, then they have to trace the policy number from a soft copy. He should then read the terms and conditions and prepare a list of damages and submit it to the insurer.

Care should be taken not to displace or remove such items from the place of occurrence. The normal response of the insurer would be to depute a loss assessor to inspect the affected site or the damaged property. Hence, the items should be allowed to be inspected.

Insurers have their own yardstick to evaluate the loss caused in such situations. The fine print is the description of exclusions from the cover. The insurers print certain conditions under which the expected claims are excluded. In normal course of transactions, while buying a policy, the customer may not be made aware of such exclusions.

Policyholders should be very careful while buying a policy and while filing claims. If they are not satisfied with the assessment of loss made by the insurer, they need to insist on a review of the assessment before signing the discharge voucher for settlement of claims. One of the major losses suffered by people in urban areas is in respect of the motor vehicle.

A comprehensive motor insurance policy does cover losses due to flood, fire, theft, arson, etc. The policyholder should ideally take a photograph of the vehicle submerged in water or swept away to another location away from the road and he should furnish that photograph while filing the claim. He should not try to drive the vehicle or to get it repaired before the representative of the insurer has inspected the vehicle. Under the standard comprehensive policy, one should not expect claim against damage to the plastic parts, upholstery, etc., but compensation for entire cost for all mechanical work and concerned replacements must be expected. If the insurer denies such claims, the policyholder needs to register his dissatisfaction and request for review of the claim amount.

Be patient with procedures

In the situation where a natural disaster is on the scale of a catastrophe, the insurers also find it very difficult to meet all the expectations of the policyholders in terms of due diligence and prompt settlement of a claim. The difficulties of the insurers also must be understood by the claimants and they need to be a little patient with the official procedures, which insurers cannot afford to overlook.

Following the unprecedented flood causing widespread damages in Kerala, IRDAI has instructed all insurers to step in to settle claims as soon as possible for those who suffered a loss of life and property. The government has also instructed all life insurers to settle claims in respect of the Jeevan Jyoti Bima Yojana, Suraksha Bima Yojana and the Fasal Bima Yojana without any delay.

The insurers have also been taking proactive actions in this regard. For securing the real value of insurance in such situations, the claimants need to be fully aware of the claim procedure and the claim amount that he is entitled to under the policy that he holds or a deceased relative held on his life or property.

In case one is not satisfied with the amount of settlement of claim, one must raise the matter in appropriate forum such as the insurance ombudsman, consumer forum, etc. A policyholder has absolute right to receive monetary value of the lost or damaged property to the extent of the amount of risk cover stipulated under the policy that he purchased for protecting his interests in the event of unforeseen circumstances.

Insurance Claim Process

What’s next? Who do you reach out to first? What are your obligations? Losses are stressful, but they shouldn’t be confusing. You have your claims professionals to lean on as you regroup and recover your business operations. They can walk you through the crucial steps that follow.

Navigating the 5 steps

The insurance claim process typically involves five main stages, from the moment you report your loss to the resolution of your claim. You can prepare for the process by gathering relevant documents (think receipts, original invoices and proof of ownership), gathering photos and accounts of the event or damage and familiarizing yourself with the steps below.

Your insurance claim, step-by-step

Connect with your broker. Your broker is your primary contact when it comes to your insurance policy – they should understand your situation and how to proceed. Once you give your broker a detailed list of all the items that were damaged or lost and any photos or videos that help to explain the circumstances, an adjuster will follow up with you to continue the claims process.

Claim investigation begins. After the claim has been reported, it will need to be investigated by an adjuster to determine the amount of loss or damages covered by your insurance policy. The adjuster will also identify any liable parties, and you can help the process by providing any witness information or other parties’ contact information.

Your policy is reviewed. Once the investigation is complete, the adjuster will go through your policy carefully to determine what is and isn’t covered under your policy, and inform you of any applicable deductibles that may apply to your case.

Damage evaluation is conducted. In order to accurately evaluate the extent of the damage, your insurance adjuster may hire appraisers, engineers or contractors to lend their expert advice. Once the evaluation is complete, your adjuster will provide you with a list of preferred vendors to help with repairs. You’re not obligated to hire these vendors, but it can save you a good deal of time and research.

After repairs have been completed and lost or damaged items have been replaced, your adjuster will contact you regarding the settlement of your claim and payment. The amount of time it takes to receive payment will depend on the complexity and severity of your situation. Every claim is different and although the claims process can vary slightly according to the situation, your adjuster will devote the time and attention it takes to resolve your particular case.

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“The greatest threat to our planet is the belief that someone else will save it.”
– Robert Swan, Author

“We do not inherit the Earth from our ancestors; we borrow it from our children.”
– Anonymous Proverb

Keemat: January – February 2019
Children born by cesarean, or C-section, more often develop food allergies. The opposite applies to very preterm children. This is shown in a study of more than one million children conducted by researchers at Örebro University and Karolinska institutet, published today in the Journal of Allergy and Clinical Immunology. “We believe that children born by C-section have a different bacterial flora than that passed on to vaginally delivered children and that the flora may impact the risk of developing food allergies,” says Jonas F. Ludvigsson, pediatrician and researcher at Örebro University. “We do not know for sure why the risk is lower in very preterm children, but it may have to do with the neonatal care that they receive,” says Niki Mitselou, pediatrician as well as doctoral student at Örebro University and the lead author of the study.

Niki Mitselou and Jonas Ludvigsson have studied children born between 2001 and 2012 in Sweden. Data shows that children born by C-section run a 21% higher risk of developing food allergies than children born by normal delivery. Smaller studies with similar findings have been conducted, but this is the first major national study where researchers have been able to point to a link between childbirth method and food allergies.

“One in six children today is born by C-section. It is important that the mothers-to-be and physicians are aware of the risks associated with C-sections both in the short and long term, and that these risks are taken into account in planned C-sections,” says Niki Mitselou.

“What surprised the physicians the most was that children born preterm run a lower risk of developing food allergies - a 26% lower risk in fact. “We have studied the very preterm children - born before week 32. Since these children are closely monitored by pediatricians also after they have left the neonatal ward, any food allergies should most likely have been detected. Instead, these children are at a lower risk.” “We believe the lower risk may be because of a different food introduction to very preterm infants compared to other children, or that factors relating to neonatal care may protect against food allergies,” says Jonas F. Ludvigsson.

The researchers have also studied the impact of birth weight and the newborn’s status five minutes after birth (the so-called Apgar score). During this test, physicians evaluate on a scale of 0 to 2, for example the baby’s breathing, pulse, color and activity. “Children who scored low directly after birth, a sign of severe stress during birth, run an increased risk of developing food allergies. This also applies to children who have a higher birth weight than expected,” says Niki Mitselou. “The researchers’ goal is to find causes of food allergies in order to prevent children from developing allergies.

Algae Fuels – One simple solution to our fossil fuel crisis?

Dr Sitaram Dixit, Chairman – CGSI

India’s energy power requirement today is around 170 GW even though the installed power capacity is of around 340 GW. India fulfills 80% of its power requirements by use of coal, natural gas and liquid fossil fuels. Thanks to the growing economic and industrial development, it only keeps increasing at a rate of around 7% year-on-year. India’s heavy dependence on fossil fuels is directly responsible for our spending over 70% of foreign exchange earnings to meet the imported crude fuel costs. The steady increase in the global price of petroleum crude visibly indicates the impending crisis we are going to face in the future and reducing India’s dependence on fossil fuels by building power capacity based on alternative renewable sources of energy alone can provide significant power relief in tackling our country’s impending fossil fuel crisis. We as consumers need to recognize this fact by taking earnest efforts to reduce fossil fuel consumption by replacing it with appropriate alternate energy source in sync with our environmental conditions.

The situation facing India is indeed grave; and most people still zealously believe that boosting production of alternative solar and wind power capacity could provide relief from the looming fossil crisis. Solar power generation in India is about 3800 MW of power, which is only about 30% of the installed capacity of 25 GW. In case of wind power generation, the installed capacity is around 33 GW and generation a poor 9800 MW. In contrast, the capacity utilization of coal power projects is about 60% and in case of hydropower, it is only 50%. PM Narendra Modi dreams of building a 175 GW power generating capacity plant to fulfil India’s future energy requirements. However, in light of the current processing constraints, it would merely generate 35 GW of power making the overall project benefits remain only as a daydream.

Electrifying railway network or promoting electric cars for transportation are seemingly impressive options; however, the fact remains that all this needs lithium ion batteries that need electric power for charging. Using fossil fuels to generate this power defeats the basic purpose of reducing fossil crude consumption, clearly indicating that apart from solar and wind power projects, we should also look at other options to fulfilling our energy requirements. One available choice is algae derived biofuels! USA and other developed countries are already successful in commercially operating and licensing creditworthy proven technologies in the cultivation of algae for biofuel production as an alternative for fossil fuels, unlike in India where unfortunately very little efforts are seen.

India has tropical climate, an appropriate environment for algae farming. Algae’ cultivation takes less than 2 months to grow and certain algae species could even contain up to 30% oil. Algae only require sunshine and carbon dioxide as inputs apart from other minor nutrients, all richly available in India. Additionally, algae do not require good quality water as it can easily grow in brackish and sewage water, that too exists abundantly in India. Furthermore, one can also ferment the biomass left after oil extraction for producing ethanol for industrial use.

India is a country with many young people looking for jobs and setting up several hundreds of MSME (Micro, Small & Medium Enterprises) for cultivation of algae and ethanol production, could turn out to be a significant opportunity to generate ample employments both in the agricultural farming setups and in the industry. Optimizing algae cultivation and producing biofuels is an obvious requirement that Indian scientists, development chemists and researchers should quickly engage in without wasting any further valuable time as efforts in this direction could not only solve India’s future fossil fuel crisis but also successfully resolve our country’s human resource employment issues.
In our day-to-day life, we come across many oils like, coconut, groundnut, sunflower, safflower, sesame (til), mustard, soybean, olive, linseed, castor, rice bran, neem, karanja, mouha, etc. In this list many oils are known as edible oils and few oils are non-edible (neem, karanja, mouha). It is but natural that common man will find it difficult to decide which oils are, and then (from the big list of edible oils) need to be selected as cooking oils for the day to day consumption and why the same. In this article, we will be giving answer to this question, with proper reasoning. Many oils from above list are available in our country but quantity in not enough so, we need to import many vegetable oils mainly palm, soybean, olive, sunflower, etc. In this lot, there are raw oils and refined oils too. Raw oils obtained are refined in our country. Oils stated above are available in respective oil seeds (except rice bran oil that is available in rice bran, which is not seed). Dried copra contains about 60% oil, palm fruit & palm fruit kernel 50%, til 55%, castor 45%, mustard, safflower and linseed 35%, soybean 20% and rice bran 15%. The oil content in the seed and properties of oil may vary depending upon source, type of soil, weather, etc. Following are the methods of extracting oil from seeds, oil cakes and rice bran.

**Oil from “GHANI” or “LAKADI GHANA”:** This is old method and followed at few places. Pressure is applied on the seeds to get the oil. Seeds have to be of good quality to get better oil the oil is filtered and taken for consumption. Laskadi Ghana is available mainly in Pune & Mumbai with good market demand.

**Hydraulic Press Method:** In this method, the cleaned seeds are half way broken and pressed in a hydraulic press. No heat is applied to the mass, producing good quality, light colored oil, e.g. castor oil and olive oil.

**Expeller Method (General Process):** The available seeds are cleaned as per the need and part of the lot, other than seeds is separated. There is machinery available for performing this part of cleaning. After this cleaning, the seeds are half way broken (to ease the oil extraction process). This is the first stage to further extraction of oil from seeds. Then these seeds are placed in a steam-jacketed tank, with stirrer and cooked to required extent, with help of open steam and heat. This cooked mass is placed in the expeller, to extract oil from the mass. In the expeller, the pressure is applied on the mass to takeout oil on one side and cake on the other side containing about 6% oil. The quality, quantity of oil and retention of oil in the cake depends upon the conditions maintained in the expeller. Many years earlier, this cake was fed to the cattle depending upon the type of seed use. It is worth mentioning here that mainly in the case of copra, the cake from expeller is cooled before bagging, otherwise it likely to catch fire, due to latent heat in the cake.

**Solvent Extraction Method:** Technologists developed this method of solvent extraction of oil, due to the need, to recover the oil from the cake due to scarcity of oil and we could not afford to lose the oil in the cake. In the product or seeds, containing oil around 20% (e.g., soybean and rice Bran) is processed. In this method, the oil from the seed/product is allowed to dissolve in solvent (generally normal hexane). This mixture of oil and solvent (miscella) is further treated to recover oil and solvent separately. This oil has to be named as “Solvent Extracted Oil” and deoiled meal (containing about 1% of oil) is a byproduct of the process and is used as fertilizer. Recovered solvent is reused.

**Refining of Oils:** Oils obtained from above stated methods are raw oils and need be filtered or refined before use as per the end use. There are likely to be unwanted items in the raw oil like traces of seeds particles, traces of moisture, traces of free fatty acids, coloring bodies, unpleasant odor and items other than pure oil (Triglycerides). It may be stated here that oil is a combination of fatty acids and glycerin. Shops sell the refined form of this glycerin.

The refining process removes all above stated unwanted items. Dark color can be reduced to water white color and the product can be made odorless. Refining is done as required. The refining process involves following three stages:-

**Alkali refining:** Oil is treated with dilute caustic soda solution to reduce the free fatty acids content to the required level. Part of the color also is reduced. The byproduct of this process is “soap stock” which goes for soap manufacture.

**Bleaching:** As the name indicates in this process, the color of the oil is reduced to required extent using nickel as catalyst, carbon and fullers earth. The oil filtered is bleached oil.

**Decolorization:** The oil is treated under high temperature and high vacuum. The odor is reduced depending upon end use of the product taking enough care so that chemicals used in refining process do not occur in the refined oil.

**SELECTION OF EDIBLE OILS FOR USE:** There are about fifteen varieties of fatty acids available in these oils. Each oil contains different fatty acids, in different proportion and the property of oil depends upon nature of the fatty acids and their percentage in each oil, these fatty acid in oils fall in the group of saturated fatty acids (SFA), mono unsaturated fatty acids, (MUFA) and polyunsaturated fatty acids (PUFA). The percentage of fatty acids available in each oil is given on the container of oil we purchase. Generally, it is recommended that each person in a month should consume not more than 500 cc of vegetable oil or mixture of oils. Moreover, the oil we consume should have approximately equal proportion of SFA, MUFA, PUFA i.e., below 33% SFA, above 33% MUFA, about 33% PUFA. This percentage is naturally available in oils like rice bran oil, til oil. Now a days you find in the market, pack containing blend of oils, to suit this required proportion. It is also recommended that we do not use always the same oil, but use different oils, keeping in mind the above stated ratio.

**Omega 3 & Omega 6:** This is essential part of fatty acids is not produced in our body hence need be taken from outside. This is available in fish, green and leafy vegetables, cauliflower, etc.

**VANASPATI:** Due to high price of pure ghee, the need arose to have similar product, which can be used as ghee and technologist developed Vanaspati as similar cheap product. Different oils are modified to suit different purpose. In Vanaspati manufacture, the oils are hydrogenated that is, passing pure hydrogen gas under suitable conditions to make it hard as per the need and because of use of hydrogen gas the process is known as hydrogenation. In this process as per the government directives, different oils are mixed in required proportion. To this oil blend, hydrogen gas is passed under certain conditions to get 37.5°C melting point. This product is refined; vitamins A, D are added to take care of loss of vitamins during process. It is then packed in the containers and cooled, in a way that the product becomes either gavyani or without grains. It is important to note that 5% til oil is added in the blend to test pure ghee for the adulteration with Vanaspati and know the adulteration. It may be stated here that Trans fatty acids (TFA) which are bad for health are produced in this hydrogenation process. Technologist are working for a method to do away with the hydrogenation process and still get 37.5°C melting point required for Vanaspati.

**Knowledge is a friend in distant lands. Wife is a friend at home. To the sick the right medicine is a friend Dharma is a friend even beyond the grave.**
Fake call centres in NCR have duped over 50,000 across world, say cops
Pavneet Singh Chadha Email: pavneet.singh@hindustantimes.com

Gurugram and Noida police, in collaboration with international investigating agencies such as FBI and Interpol, are probing call centers across NCR, linked to duping people on the internet in the name of software giant Microsoft. Over 50,000 people across 15 countries are suspected to have been targeted by an online fraud worth hundreds of crores in the name of I-T giant Microsoft, said investigators who have husted a string of unscrupulous call centers across Gurugram and Noida. Gurugram and Noida police, in association with international investigating agencies such as Federal Bureau of Investigation (FBI), Interpol and Canada’s Royal Canadian Mounted police (RCMP), have so far busted as many as 17 call centers in the two cities and arrested 42 people. The probe was taken up after software giant Microsoft Corporation lodged 17 FIR’s — eight in Gurugram and nine in Noida — on November 27.

Microsoft reported that it had been receiving complaints from users across the globe that they were targeted by online frauds who first introduced a malware into their computer systems and then offered assistance in the name of the company. They directed the users to call centres and prompted them to pay sums, ranging between 100/1000 US dollars. Some of the prominent countries from where complaints were registered with the company are United States, United Kingdom, Australia, Canada, New Zealand.

"By getting remote access to victims’ computers, the accused stole data, identity and transmitted viruses to users’ systems,” Microsoft said in its complaint. On November 27, the same day as the FIRs were registered, six teams from the Gurugram crime branch and two teams from city police stations concerned conducted coordinated raids lasting over five hours at eight call centres in Udyog Vihar, Sushant Lok and Sectors 49, 18, 32, 38, 44 and 10. Eightythree hard drives, several laptops, servers and electronic gadgets were seized. The following day, Noida Police conducted raids in Sectors 2, 3, 6, 8, 6 and Ecotech-III, confiscating 34 hard disks, 10 DVRs, 12 servers, computers, laptops, phones, cheque books, phones and Rs 5 lakh cash from the accused along with financial details of several foreigners.

"A team of over 70 officials and investigators had been working for the past four months after Microsoft complained that it was receiving thousands of complaints every month from users in foreign countries. The servers, hard drives, pen-drive and systems confiscated from raids at eight call centres in the city contain database of thousands of email ids and IP addresses who were allegedly targeted. The hard drives have been sent to a laboratory for forensic examination,” said Shamsher Singh, assistant commissioner of police (Crime), Gurugram. Singh said the exact number of victims and the amount of money siphoned off by these online criminals are yet to be estimated since it is an ongoing investigation. “We are also getting a forensic audit of the seized property,” ACP Singh added. For the moment, investigators have ruled out a common link between the call centres busted in Noida and Gurugram or if the fraud was being perpetrated by one person or organisation despite all of them using a similar method to con people.”

Currently, the cases are being investigated at different police stations, but it is likely that the cyber police station will take over the cases, as the probe continues,” said Singh. Several meetings were conducted with officials from Singapore, Ireland and other countries in the probe into the scam. Gurugram police said officials from foreign law enforcement agencies had met the city police chief to present their case. Their counterparts in Noida also met the local police in October and shared action reports listing the domain address of the fake call centres that were traced to Noida, Gurugram and Delhi. Police said another meeting was held in November to discuss the plan of action and separate teams were formed.

In a related but separate development, on October 17, officials from FBI, Royal Canadian Mounted police (RCMP) and the Interpol division of the FBI had met Noida senior superintendent of police Ajay Pal Sharma to discuss the rising number of complaints against call centres active in the district that dupe foreign citizens, especially Canadians and Americans, on the pretext of providing them loans, shares and other online products. Over the past six months, the Noida police, in association with international investigating agencies, has conducted 25 raids. Over 130 people have been arrested so far in connection with the fraud. SSP Sharma said the complainant in all these cases was Microsoft. "The company was receiving more than 10,000 complaints per month that people claiming to be from their tech support were duping users. This information was passed to the FBI and some of the call centres were traced to Delhi-NCR,” he said.

Microsoft officials said the a number of call centres in the two cities were allegedly engaged in tech support scams impacting individuals in at least 15 countries, primarily the US, UK, and Australia. The growth of unregulated call centres in India involved in such scams and frauds is indicative of the scale of the issue, it said. Victim reports indicate that this is a global problem, targeting victims from mostly English speaking developed countries, a company representative said. “Protecting the public and building trust in technology and internet is a top priority for Microsoft. We are committed to working with trade bodies such as NASSCOM, relevant government ministries and law enforcement authorities, to safeguard the interests of the Indian IT industry, and educate and protect the public against such deceptive cybercrimes,” said Courtney Gregoire, assistant general counsel – Corporate, External and Legal Affairs (CELA), Microsoft Corporation.

Police said the accused persons used an exhaustive database of IP addresses and emails of people in foreign countries, which they had possibly purchased from online portals, to hack into the computer network or systems of unsuspecting users. “A user would receive an email with fake pop-up error messages stating that a malware had infected their computer systems and if not rectified immediately, their personal and financial data would be compromised. The pop-up messages would be displayed on full screen mode and would lock the user’s screen/browser,” said an official from crime branch who is associated with the probe but is not authorized to speak to the media.
Plan your money, think for the future
Nisreen Mamaji – Certified Financial Planner & Founder of Money Works Financial Advisors

We all have dreams for the future, but many of us have lost ourselves in the daily grind, where future plans have gone astray and our dreams feel like a distant memory. You want to connect with your dream and make it a reality. Yet, you are overwhelmed with many feelings. Let’s look at an example. Nisha Meghraj, a 32-year-old doctor with a thriving dermatology practice (she has two clinics on rent in Mumbai and a staff of seven), after going through her balance sheet and net worth recently, she came to the harsh realisation that her future self would need to work till 75. After due consultations, Meghraj decided to make some changes to her financial planning.

Get to know your future self: Imagine your lifestyle and personal expenses during your retirement and put a present value to this figure. Your retirement life is usually the golden era, when you will not have dependents and still be healthy and. Case by case, you may have the same kind of lifestyle. For example, Meghraj’s need of ₹1 lak per month translates into ₹3,39 lak per month at 5% inflation and 25 years from now.

Start saving for your future self: Depending on the tenure of investment, there will be many choices. These are solution-oriented mutual funds in both equity and debt. Retirement plans issued by insurance companies are designed to provide you monthly pension benefits by purchasing annuity plans. These plans are restrictive during the retirement years since the annuity is fixed and liable to tax. You may invest in the National Pension Scheme, which is a basic pension scheme with limitations on withdrawal. You may create a basket of mutual funds – diversified large cap funds for a conservative risk appetite or mid and small cap funds for an aggressive risk appetite. The last option requires discipline on your part, but maximum flexibility and control during accumulation and withdrawal phases. For example, Meghraj will need ₹5,8 crore corpus to enable her to afford ₹3.39 lak monthly, presuming her retirement period is 25 years. Therefore, Meghraj is required to invest ₹18,000 in an SIP assuming her returns are 15% annually. If her returns drop to 12% per annum, she will need to invest ₹3,000 in her SIP.

Consult a professional: While your parents and relatives have the best intentions for you, what worked for them may not work for you. There are a lot of things to consider. A professional knows how to systematically analyse the variables, and build a short and long-term financial plan sensible for you. Vist the professional advisor carefully. When you find a few, who seem capable and trustworthy, let them know the details of your current finances and what you expect to be earning over the next few years. Then ask a simple question: “What would you do if you were in my shoes?” The answer you like best is going to be from the individual who is the best choice for you.

Understand the options since your money is at stake: Make sure to understand some of the basics like, mutual funds give small or individual investors access to professionally managed portfolios of equities, bonds and other securities. Each unit holder, therefore, participates proportionally in gains or losses of the fund. Mutual funds are operated by professional money managers, who allocate the fund’s investments and attempt to produce capital gains and/or income for the fund’s investors. They are usually diversified, transparent and regulated by SEBI.

Review your plan once in 3 years: You are steadily becoming your future self. Hence, you should take stock of your changed financial situation and evaluate your investments every now and then. Don’t do this too often. Strategic decisions taken once every 3 years should do the trick.

Guide to the new ‘avatar’ of ATMs
Radha Rama Dorai – Managing Director, ATM & Allied Services, FIS

Of late, you may have noticed a somewhat bulky, automated teller machine (ATM)-like machine next to your regular ATM or in place of it. Well, that is the new version of your ATM. It is called ‘cash recycler’. The cash re-cycler does exactly what its name suggests – it recycles cash. It accepts cash deposits as well as dispenses the very same notes – like a cashier at the bank. Using your debit or ATM card or by entering your account number and placing the currency notes in the appropriate stack in the deposit slot of the machine, you can deposit money into your account and get instant credit.

The machine reads each note deposited, looks for all required security features, takes a picture of the number printed on the note and tags it against your account number or card number. The notes you deposit do not have to be crisp and new. The machine will accept notes that have all prescribed security features. In case you deposit a heavily mutilated note, whose security features are not readable, or deposit a note that has ceased to be in circulation, the machine will return it. If a note is detected counterfeit, the note will get impounded by the machine and will not be returned. If the numbers of counterfeit notes deposited are more than a few, the bank is required by law to file a police complaint against you for the possession of counterfeit notes. You can also withdraw money from recyclers. The cash deposited is stacked denomination-wise, in ‘cassettes’ in the machine. Typically, there are four cassettes in these re-cyclers, three for individual denominations such as ₹100, ₹500 and ₹2,000 notes. The fourth cassette is an ‘all-in’ i.e. for the remaining denominations that you might deposit – like ₹500 or ₹200 notes. There are also bins in the recycler for storing counterfeit notes impounded from customers. In normal course, the bank would have to make arrangements for transporting cash collected from its branches to a currency chest. At the currency chest, the notes need to be sorted into three different categories – ‘ATM-fit’, ‘branch-fit’ and ‘unfit’ – for circulation. The ‘ATM-fit’ notes are packed denomination-wise and handed over to cash-in transit agencies engaged to load the ATMs. With a recycler, all these activities are redundant to some extent. The machine helps in ensuring longevity of notes since the handling of the notes is reduced from one depositor customer to another customer making a withdrawal, without the bank or cash in transit agencies handling the same.

A recycler is effective from a cost saving perspective if the withdrawal of cash from the machine and the deposit of cash in the machine, is in balance. If, however, the supply of cash - deposits in the machine is fewer and the demand for cash-withdrawals from the machine is higher, the machine will run out of cash and must be replenished. There could be situations where deposits are higher than the withdrawals, leading to the cassettes in the machine getting full and therefore would need evacuation of cash. Banks should actively monitor the cash position in these machines. At times, recyclers tend to go against the spirit of ‘cash and dash’ that has been the hallmark of most ATM machines, so far. This happens because a deposit transaction at the recycler takes more time than a withdrawal transaction. When there are customers waiting to deposit money into the machine, a customer who wants to quickly withdraw cash, must wait for a longer time. This inconveniences the customer who may then go to another bank’s ATM and withdraw cash. This means that the bank, to which the customer belongs, will have to pay ‘interchange’ to the competitor bank. To avoid this situation, banks have started deploying a recycler and an ATM side-by-side. This situation will also ease as more ATMs get replaced with recyclers. These machines are prone to the same threats as an ATM. As a customer, you will take the same precautions that you take while using a regular ATM.
Diabetes, often referred to by doctors as diabetes mellitus, describes a group of metabolic diseases in which the person has high blood glucose (blood sugar), either because insulin production is inadequate, or because the body's cells do not respond properly to insulin, or both. Patients with high blood sugar will typically experience polyuria (frequent urination); they will become increasingly thirsty (polydipsia) and hungry (polyphagia).

A medical doctor like Dr. B. M. Hegde remarked that in any health check-up, you go in as a person and come out as patient.

The Women's Wing of Sri Shanthi Sangeetha Sabha at Jassubhai Convention Hall featured Dr. Seetha Raju, practitoner of medicine and diabetology since 1990 and had been an Associate Professor at the Rajiv Gandhi Medical College and honorary physician at the Jupiter Hospital. Dr. Seetha Raju presented an informative and educative lecture for knowledge and learning for lay people. She highlighted myths and facts of diabetes, Type 1 and 2, symptoms, causes, diagnosis, treatment, medication, diet, regular exercise and making New India.

Key to a healthy life with diabetes is early diagnosis and acceptance without stress. Diabetes in adults can be caused due either to insulin deficiency or resistance (not acting effectively on muscles to use up carbohydrates). About 20-30% of diabetics are not overweight. When they are overweight, it is because of insulin resistance. Overweight people with big tummies lying on the back have plenty of skin tags, PCOs unable to get pregnant soon. You can have insulin resistance and still not have diabetes if you have insulin secretion. They both go hand in hand.

Asia (India and China) has the largest number of diabetics. This genetic tendency cannot be prevented. Diabetes and hypertension are silent killers with impact on all the parts of the body and externally we do not recognize anything. Science and studies have shown that the first five years after you have diabetes, if you control sugar well, the pancreas has a remedy and you can handle complications or even prevent.

**Myth 1:** Diabetes is a serious disease/no form of it is mild.
**Myth 2:** Only older people develop diabetes.
A child can get young adult (20), middle age man and old people. Age is no bar and diabetes is not a choice. If one parent is diabetic, there are 40% chances of children getting diabetes and with both parents; they are more (70%). Catch them young when there is family history of diabetes.

**Myth 3:** Diabetes is caused by eating too much sugar.
Sugar is not a complete ‘no’ for diabetes. Everything in moderation is good. Amount of carbohydrates that can allow sugar and sweets in diet should be 60%, fat 20% and protein 20%.

**Type 1:** The body does not produce insulin in 10% of diabetes cases. Caused by genetics and unknown factors like viral infections. Young children must use insulin. Wasim Akram had Type 1 diabetes at the age of 30 and even after his career; he kept busy by being coach and trainer. His Mantra is Accept-Control-Move on and do not fear insulin. Others willing to learn, accept their condition, control it and run marathons and live life.

No sugar because sucrose is digested fast and pushes up the blood sugar considerably and the human body does not have enough insulin to handle that because there are 2 stages of insulin secretion. The first stage is for 6 minutes and handles the sugar. However, in diabetics, the first stage is lost. As you eat sugar, the sugars go up but no insulin for 6 minutes and just accumulate.

**Type II:** The body does not produce enough insulin for proper function. Approximately 90% of all cases of diabetes worldwide are of this type. Besides genetics, life style factors are important.

**Myth 4:** People with diabetes are likely to get colds and other illnesses.
Diabetics are not sick people if they control diabetes well. Doctors tell them diabetes is equivalent to HIV and affects the immune system. Diagnosis - adults manifest with symptoms like feeling tired, losing weight in spite of increased appetite and others like thyroid condition, feeling lethargic, numbness in the hand, recurrent infections not getting cured with the normal cause of medications. It is mandatory that they test for blood sugar. Adult vaccination – 2 vaccines yearly, polycyclic vaccine once a year and pneumococcal vaccine once in 5 years (even people older than 65 years).

**Myth 5:** Play sports or exercise.
70% control of diabetes is diet and any form of exercise like walking, swimming, running, yoga, jogging, dancing that you can enjoy and sustain. Those with retinopathy, high blood pressure and heart condition should not do vigorous exercise. Avoid aerobics and weight lifting.

**Myth 6:** Whether diabetes should get pregnant?
If they are controlled well, they can have a normal healthy pregnancy. Only insulin drug is available during pregnancy besides diet and exercise, people can have healthy life and children.

**Myth 7:** People with diabetes who need to use insulin are in serious trouble.
Complications go on between the body in the eye, heart, kidney, nerves and foot when you change the doctor and precious time is lost.

**Myth 8:** People with diabetes need to follow a special diet.
Eat a lot of grains and cereals, vegetables and fruits, refined sugar, oils and fats to a lesser extent.

**Myth 9:** Potatoes, bread, pasta and rice are forbidden but allowed to eat potatoes and staple diet of rice in South and East India.
Weight to weight, calorie to calorie, wheat and rice are the same. Say no to rice, because glycemic index, capacity of the meal to push up the blood sugar is higher with rice than with wheat because wheat and oats takes longer time to digest. They are digested slowly so that your body insulin can handle whereas with rice, the sugar goes up and no insulin to handle.

In traditional way of Indian eating of rice mixed with sambar, dal, vegetable, the glycemic index of rice goes down when dal is mixed with it resulting in healthy meal. Thus, our forefathers ate well, lived happily and were free of disease. Now eating habits have changed to fried rice, rice with pasta or Thai curry. Grated, mashed, boiled and baked potatoes have lesser glycemic index and without adding fat, cream and ghee.

When you crave to eat something, and you do not eat, anti-insulin hormones are released raising the sugar. Brown bread is mixed with caramelized sugar and is as harmful as white bread. It is whole wheat or multigrain bread and in baking, fat and oil are used. There are foods available in malls as low fats (not low calorie) containing...
maltodextrin or increased carbohydrates, proteins. Low fat and high calorie are synonymous. Sugar free sweets or chocolates contain artificial sweeteners with calories.

Myth 10: Honey is better than sugar. Sugar is better than jaggery and cane sugar.
Calculate carbohydrate content in case of substitute. Eat nuts in limited quantity because they contain mon saturated fatty acids with low glycemic index. Eat a lot of protein and fiber and Omega-3 fatty acids. Honey is 75% sugar and 25% water. One teaspoon of honey gives 25 calories whereas one teaspoon of sugar gives 16 calories. These are facts to be explained to diabetics.

Myth 11: Cold pressed organic coconut oil.
Organic refers to the method of farming without artificial ripeness and pesticides. Farmer’s produce is good (no preservative added while growing the crop) and what is packaged and marketed are 10 times more expensive than normal foods and preservatives are added to increase the shelf life. Hence no point in spending extra money and buying organic food.

Salads contain oil, vinegar dressing, is healthy that gives calories and fruits (in between meals with limitation) or sugar that has to be handled by the body insulin. You cannot load the body with carbohydrate in the meal and fructose after from fruits (banana 116 calories; mango 200 calories, half a chiku and papaya – meal of 600 calories).

Myth 12: Herbal and weight loss products
You have to go through diet and exercise. These products contain a chemical ephedrine, which is called ephedrine, increases heart rate and BMI to lose weight and are not safe. Surgical method of weight loss is by liposuction. It is a type of cosmetic surgery that removes fat from the human body in an attempt to change its shape.

Myth 13: Diabetes does not run in my family:
There are preventable and non-preventable causes of diabetes. Family history is one of the several risk factors. Type of diet, amount of exercise, cholesterol levels, smoking leads to heart attack and alcohol (within limits) and blood pressure (60% of diabetic by the year 6 develop some effect on kidney and BP goes up). If detected earlier, kidney damage can be prevented. Dialysis entails poor quality life and the family collapses with the patient due to expenses, logistics of getting the person for dialysis and the tests to be done.

Excess sugar in the blood is deposited in the liver and stored as triglyceride. Before you are detected with diabetes, sugar has been high for 1-2 years which is called prediabetes and is reversible whereas diabetes is not. If your fasting sugar and post lunch are little higher just above normal, take steps like diet and exercise. Do regular testing since at that stage diabetes is reversible. Non-preventable risk factors are family history, advancing age and culture.

Myth 14: Lose weight for a diabetic to improve.
They advocate 7% weight loss over a period of 7-9 months. This translates into 30% reduction in complications. Bad fat is over abdomen, thighs and arms. It is abdominal fat you need to target.

Myth 15: Type 2 diabetes only affects fat people.
Myth 16: People with diabetes go blind and lose their legs.
Until retinopathy is checked, one would not realise what is happening to eyes and once it sets, treatments for this are expensive and frequency of laser sitting keep increasing. Neuropathy for foot amputation. Small vessels are affected, kidney, eye and nerves. A patient with neuropathy has no sensation in the leg, even a small injury to the leg, he will not have pain and that eventually leads to foot amputations.

Once a week sit with the feet up facing a mirror and look at the soles of feet. Nobody wipes in between the toes especially in rainy season (fungal infections are common in diabetes). Neuropathy, nephropathy and retinopathy can be prevented with good control. The same does not hold good for the heart as the risk of cardiovascular disease is much higher for a diabetic, it is crucial that blood pressure, cholesterol and triglyceride levels are monitored regularly and look out for complications.

Making New India
Dr. Seetha Raju dealt with how society can curb the epidemic of diabetes and obesity. Spread awareness. India’s economy is growing. GDP is increasing. Sensex is high. They did a program Making New India - rural India, revolution and truth. In reforms, we should eat the local produce by the farmers. Age is no bar to exercise for health like trekking, walking and mountaineering and walk underwater etc. for sustained muscle contraction. Group activity like yoga goes a long way in being sustained.

Digital India
Everybody is on computer and phone. Sitting for long periods of time is as dangerous as smoking for heart. Dancing is a form of exercise. You have to pay more if you want to eat junk food in Kerala. Education through play. 40% diets are sugars, onion and fried chips. Read food labels. Calories and energy per serving are important. No sugar and added fats.

Central government started a department for sports, exercise and rehabilitation science, exercise mandatory as a subject in school curriculum. Government should improve infrastructure, make parks and pavements, nutrition curriculum in school. As a society, we should encourage traditional Indian yoga, meditation, dance.

Doctors spend time with patients impressing on them importance of exercise and right eating and advocacy for change in lifestyle. Media and classrooms to spread awareness. Watching TV while eating is the worst habit. Outdoor games with children, joint family activity. She appealed to make an effort at all the levels to change the world.

The views expressed in ‘Keemat’ do not necessarily reflect those of CGSI, but rather are personal opinions of the author(s) concerned.

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Encouraging people to eat a wide variety of foods may not be healthier option
Courtesay: https://newsroom.heart.org (News-Medical.Net)

Encouraging people to eat a wide variety of foods to ensure they meet all their dietary needs may backfire, according to a new scientific statement from the American Heart Association that provides an overview of recent scientific studies. “Eating a more diverse diet might be associated with eating a greater variety of both healthy and unhealthy foods,” said Marcia C. de Oliveira Otto, Ph.D., lead author of the statement published in the American Heart Association journal Circulation. Combined, such an eating pattern may lead to increased food consumption and obesity. “Eating variety of foods” has been a public health recommendation in the US and worldwide for decades. While some dietary guidelines highlight greater diversity of recommended foods, there is little consensus about what so-called dietary diversity is, how it is measured and whether it is a healthy dietary goal.

The statement authors conducted a thorough scientific literature review of articles published between January 2000 and December 2017. They concluded: There is no evidence that greater overall dietary diversity promotes healthy weight or optimal eating. There is some evidence that a wider variety of food options in a meal may delay people’s feeling of satiation (fullness), increasing the amount of food they eat. Limited evidence suggests that greater dietary diversity is associated with eating more calories, poor eating patterns and weight gain in adults. Instead of telling people to eat a variety of foods, the statement authors conclude that dietary recommendations should emphasize adequate consumption of plant foods, such as fruit, vegetables, beans and whole grains, low-fat dairy products, non-tropical vegetable oils, nuts, poultry and fish, and limit consumption of red meat, sweets and sugary drinks.

The American Heart Association Dietary Recommendations and the DASH Diet (Dietary Approaches to Stop Hypertension) are both examples of healthy eating patterns. “Selecting a range of healthy foods, which fits one’s budget or taste, and sticking with them, is potentially better at helping people maintain a healthy weight than choosing a greater range of foods that may include less healthy items such as donuts, chips, fries and cheeseburgers, even in moderation,” said Otto, who is also assistant professor of epidemiology, human genetics and environmental science at The University of Texas Health Science Center at Houston, Texas.

E-cigarettes: Safer than smoking, but more damaging to health – Sanchita Sharma (Courtesy: Hindustan Times)

The health ministry has asked all states to ban electronic cigarettes (e-cigarettes) and other heat-not-burn vaping devices over risks to public health and ensure they are not “sold, manufactured, distributed, traded, imported and advertised.” The advisory followed a week after the Delhi high court gave the ministry seven days to file an affidavit, giving a time frame within which regulatory measures will be enforced to control the sale of e-cigarettes. Are e-cigarettes safer than traditional cigarettes or are they pathways to nicotine addiction? The debate remains highly polarised on whether e-cigarettes should be banned or not. Its supporters say the nicotine vapour in e-cigarettes is less harmful than conventional tobacco and helps in smoking cessation, while critics ask a ban because of its potential for misuse as a gateway device to nicotine addiction and smoking. There’s evidence to show that young e-cigarette users are at increased risk for both starting to smoke and becoming long term users of combustible tobacco products, according to the American Cancer Society position statement on e-cigarettes issued in February, 2018. While the jury is still out on a ban, everyone across the board supports stringent regulation and a ban on indoor vaping because of its link with heart disease and promoting tumours. Nicotine vapour also affects foetal growth and lowers brain development in children and adolescents, leading to learning and anxiety disorders.

WHAT’S IN A VAPE?: The vapour (aerosol) contains several toxicants that damage human health, such as glycols, aldehydes, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbon (PAHs), tobacco-specific nitrosamines (TSNAs), metals, silicate particles and other elements. The toxicants on average are lower than in cigarette smoke, but heavy metals such as lead, chromium and nickel and chemicals like Formaldehyde are often more in the vapour of e-cigarettes than in traditional cigarettes, according to the World Health Organisation report on e-cigarettes. Some toxicants are specific to e-cigarettes, such as glyoxal, which causes gastric irritation and kidney damage. The levels of toxicants vary enormously across and within brands and are sometimes higher than in tobacco smoke because of thermal decomposition of e-liquid ingredients and difference in battery voltage and unit circuitry, which can alter how the product heats the solution to an aerosol.

BAN OR REGULATE? With evidence still inconclusive on how effective e-cigarettes are in helping smokers completely quit nicotine addiction, scientists advise caution. The UK’s House of Commons Science and Technology Committee report on e-cigarettes released in August supports e-cigarettes as a harm-reduction tool and recommends its use on prescription for tobacco cessation. It notes that they do not contain tar and carbon monoxide and are substantially less harmful by around 95% than conventional cigarettes, but also underline the need for regulation because “there are uncertainties, especially about any long-term health effects, because the products have not yet had a history of long use.” The American Cancer Society also warns the health effects of long-term use are not known and asks for closer monitoring and discouraging the dual use of e-cigarettes and combustible cigarettes. Making sense of the latest evidence on e-cigarettes, journal The Lancet warns, “e-cigarettes are big business, with tobacco companies having a large stake in many of the products. It is naive and premature, of the (UK House of Commons) Committee to confuse an absence of evidence with an absence of harm.” Based on available scientific evidence, e-cigarettes must be regulated not as consumer products but as an addictive drug that can be prescribed only to help users stop smoking. With industry trends, showing India’s e-cigarette market will grow at a compound annual growth rate of 34% up from ₹4.1 billion in 2017 to ₹7.4 billion in 2019, according to GlobalData Plc, the drug regulator must ensure it’s only used as a harm reduction device to quit nicotine addiction.

A low-calorie diet causes different metabolic effects in women than in men – Courtesy: https://newsroom.wiley.com

In the study of more than 2,000 overweight individuals with pre-diabetes who followed a low-calorie diet for 8 weeks, men lost significantly more body weight than women, and they had larger reductions in a metabolic syndrome score, a diabetes indicator, fat mass, and heart rate. Women had larger reductions in HDL-cholesterol, hip circumference, lean body mass (or fat free mass), and pulse pressure than men. “Despite adjusting for the differences in weight loss, it appears that men benefitted more from the intervention than women. Whether differences between genders persist in the long-term and whether we will need to design different interventions depending on gender will be interesting to follow,” said lead author Dr. Pia Christensen, of the University of Copenhagen, in Denmark. “However, the 8-week low-energy diet in individuals with pre-diabetes did result in the initial 10% weight loss needed to achieve major metabolic improvement in the first phase of a diabetes prevention program.”

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World of different cryptocurrencies
Praveenkumar Vijayakumar – Chief Executive Officer & Founder, Belfrics Global (Courtesy: Hindustan Times)

The world of cryptocurrencies came in to existence with the invention of Bitcoin in 2009. Today, we have over 1,500 types of cryptocurrencies. It may seem like you’re hearing about a new type of digital money every day. However, not all are significant.

The total cryptocurrency market capitalisation is around $250 billion, of which, the top 20 cryptocurrencies account for almost 90% of the market. Though it is hard to pinpoint the success factors of a cryptocurrency, this may help:

Tech and usage: Assessing the cryptocurrency with its underlying technology will be a very good measure to understand its investment potential

Market capitalisation: A large market capitalisation will give scope for faster liquidation and reduced chances of market manipulation.

Total available supply: It might be hard for even experts to gauge the effect of total supply as the market is still nascent, but forum discussions will give you the pros and cons. Developers and promoters: To make a sustainable global impact, the team behind the cryptocurrency needs to be very capable. Here is a look at the top five cryptocurrencies based on market capitalization.

BITCOIN: $140 BILLION MARKET CAP

Bitcoin leads the pack with the largest market capitalisation and largest daily traded volume. Using proof of work (POW) consensus, the transactions are written on the decentralised bitcoin blockchain by miners. Fresh bitcoins are also released per every block created. There is a limit of 21 million bitcoins that could be created of which 17 million have already been created. It is the most widely accessible and accepted cryptocurrency and it has physical ATMs. However, it lags behind new-age cryptocurrencies.

ETHEREUM—$30 BILLION MARKET CAP

Launched in 2015, ethereum is the largest and most well established, open-ended decentralised software platform that enables smart contracts and distributed applications to be built and run without any downtime, fraud or interference from a third party. Using the same consensus mechanism as bitcoin, ethereum was tailor-made for specifically creating smart contracts. It is also the largest host for ICOs (initial coin offerings).

rippel—$13 BILLION MARKET CAP

Released in 2012, ripple (XRP) is both a digital currency and a real-time gross settlement system (RTGS). The ripple platform is an open source protocol, which is designed to allow fast and cheap transactions. The goal of ripple is to build on the decentralised digital currency approach and allow faster transactions. It can process up to 1,500 transactions per second at less than half the cost of traditional international currency transactions, helping banks cut down their costs.

Gurgaon-based Harini Gopalakrishnan, 28, who works as a consultant for an audit firm, started investing in mutual funds through systematic investment plan (SIP) in 2017. “Earlier, I used to put money in recurring deposits every month. On maturity, I used to convert it into a fixed deposit or use it for my personal needs. I got to know about mutual funds from my roommate,” said Gopalakrishnan.

After reading about mutual funds on websites, she started putting aside ₹30,000 a month in mutual funds that focused on banking. A year later, she is extremely disappointed with the returns. “My mutual fund investments are in the negative and I have already stopped my SIP. I am thinking of putting my money in infrastructure-focused mutual fund, as I feel the sector will pick up pace,” she said. Gopalakrishnan has made multiple mistakes already. Let’s go through it one by one. Here are some takeaways for those planning to start investing in mutual funds:

EDUCATE YOURSELF

Mutual funds industry is big. After the new classification by the Securities and Exchange Board of India (SEBI), there are broadly 31 mutual fund schemes in equity and debt funds — 17 in equity and 14 in debt. There are also exchange-traded and thematic funds. Understanding it may be difficult for a beginner. “As a new investor, you should be aware of large-cap equity funds, diversified funds, equity-oriented hybrid funds, short-term debt funds and liquid funds,” said Srikanth Meenakshi, co-founder and chief operating officer, FundsIndia.com. Large-cap mutual funds invest in large-cap companies in the market. In case of diversified fund, the fund manager invests all across the market, and it is more flexible. Hybrid funds have low-risk debt and high-risk equity. Short-term funds are low-risk funds that invest in debt, while liquid fund is to park money for a short period.

WHAT SHOULD YOU DO?

If you don’t understand mutual funds, seek professional help. “You go to a barber for a haircut. For medical problems, you go to a doctor. Similarly, financial planning, too, requires serious attention and professional help. Get a good advisor who can make a financial plan for you,” said Nilesh Shah, managing director, Kotak Mahindra Asset Management Co. Ltd.

Gopalakrishnan’s mistake was that she didn’t seek professional advice. Also, she didn’t give time for her money to grow. “You can’t grow a mango tree in two years. It takes 12 years to grow. Your portfolio won’t give you returns overnight just because you have taken professional help,” said Shah.

Don’t venture into risky products if you don’t have the experience. “What do you do at a wedding where there are 50 food stalls? You mainly rely on experience. You opt for chhole bhature because you have had it in the past. Similarly, if you have the experience of large-cap, mid-cap, small-cap and sectoral fund, you go by your experience. What if you are attending a wedding for the first time? Then, you first taste a bit, and depending on how you like it, focus on one food stall. Similarly, if you are inexperienced in mutual funds, start small,” said Shah.

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Mutual funds: Go slow, steady
Vivina Vishwanathan, vivina.v@htlive.com (Courtesy: Hindustan Times)
Consumer’s Crossword! (Answers to the clues are present interspersed in the current Keemat itself)

ACROSS
1. A banking system? (4)
4. Asia has the largest number of diabetics. (8)
6. Friend at home? (4)
7. Concessions? (9)
9. Island nation (3-7)
10. A toxic chemical. (12)
12. Regulatory agency. (4)
13. They cut your hair. (7)
14. Parabens affect this hormone. (9)
15. Suburban place. (7)
16. It should have numbers, symbols, lower and upper cases. (9)
20. It is replacement for Ghee. (9)
22. Common practice in Goa? (9)
24. Snobbish (8)
25. Medical doctor. (12)
26. A silent killer. (12)
28. Non-edible oil (7)
29. Investigation agency. (8)
31. A regulatory body. (5)
32. Fuel (8)
33. Hungry (10)
35. Almighty Lord. (5)
36. It has sugar and water. (5)
40. It is present in cigarettes. (8)
42. A medical journal. (6)
43. Alternate money? (16)
48. Sometimes foods cause these. (9)
50. Process to reduce the color. (9)
52. A trade body. (7)
53. India is such a country. (14)
57. Exercise. (4)
58. Thirsty (10)
60. Process to reduce smell. (13)
61. It holds circuit bench. (5)
62. A seed. (7)
66. Always a friend. (6)
68. Born before 32 weeks. (7)
69. Middleman. (6)
70. A solvent. (6)
75. Joint empowerment drives it (10)
76. Site of largest solar heating systems. (6)
77. Plastic type. (3)
78. A proof of identity. (7)
79. An Italian dish. (5)
80. Method to reduce weight. (11)

DOWN
1. Indian investigation agency? (6)
2. Country where cash crashed. (9)
3. A heavy metal. (6)
5. It also kills germs. (8)
8. Arrogant (8)
10. Birth weight score for babies. (5)
11. Food item. (7)
12. Process to reduce smell. (13)
17. A form of exercise? (7)
18. A form of exercise? (7)
19. Anti-fertility vaccine. (14)
21. Last name? (8)
23. Cutting off. (10)
27. Stores cash. (6)
29. Frequent urination (8)
34. Mandatory for driving vehicle. (7)
37. Tired. (9)
38. Sugar (7)
39. An animal. (3)
41. Joint empowerment drives it (10)
42. A European country. (6)
45. Investigation agency. (3)
46. Unknown (9)
47. A toxic chemical (13)
48. A Continent. (9)
49. A place near Delhi (5)
51. Stored sugar in liver. (12)
53. A heavy metal. (8)
54. Another name of Shiva. (9)
55. A gas. (8)
56. American country. (6)
59. Hospital for the mentally challenged. (6)
63. Fullness. (9)
64. Chemicals increase heart rate. (7)
65. Surgery method. (8)
67. Oil - Solvent mixture. (8)
71. River goddess. (5)
72. Non-edible oil (5)
73. Investigation agency. (4)
74. A statutory body. (5)

Keemat: January – February 2019
Designed by Dr. Sitaram Dixit, Chairman CGSI
**LAUGHTER THE BEST MEDICINE**

A doctor at an insane asylum decided to take his patients to a baseball game. For weeks in advance, he coached his patients to respond to his commands. When the day of the game arrived, everything went quite well. As the national anthem started, the doctor yelled, “Up Nuts” and the patients complied by standing up. After the anthem, he yelled, “Down Nuts” and they all sat back down in their seats. After a home run was hit, the doctor yelled, “Cheer Nuts” They all broke out into applause and cheered. When the umpire made a particularly bad call against the star of the home team, the Doctor yelled, “Booohoo Nuts” and they all started booing and cat calling. Comfortable with their response, the doctor decided to go get a beer and a hot dog, leaving his assistant in charge. When he returned, there was a riot in progress, “What in the world happened?” The assistant replied, “Well Sir, everything was going just fine until this person walked by and yelled, “PEANUTS!”

A Chinese doctor cannot find a job in a Hospital in the US, so he opens his own clinic and puts up a sign outside and it read, ‘GET TREATMENT FOR $20 - IF NOT CURED GET BACK $100.’ An American lawyer thinks this is a great opportunity to earn $100 and goes to the clinic.

Lawyer: ‘I have lost my sense of taste.’
Doctor: ‘Nurse, bring medicine from box No. 22 and put 3 drops in patient’s mouth.’
Lawyer: ‘Ugh, this is kerosene!’
Doctor: ‘Congrats, your sense of taste is restored. Give me $20.’
The annoyed lawyer goes back, few days later to recover his money.
Lawyer: ‘I have lost my memory. I cannot remember anything.’
Doctor: ‘Nurse, bring medicine from box no. 22 and put in 3 drops.’
Lawyer (annoyed): ‘This is kerosene. You gave this to me last time for restoring my taste.’
Doctor: ‘Congrats. You got your memory back. Give me $20.’
The fuming lawyer pays him and then comes back a week later determined to get back $100.
Lawyer: ‘My eyesight has become very weak. I can’t see at all.’
Doctor: ‘Well, I don’t have any medicine for that, so take this $100.’
Lawyer (staring at the note): ‘But this is $10, not $100!’
Doctor: ‘Congrats, your eyesight is restored. Give me $20.’

A man went on a business trip to China and wanted to buy some gifts for his kids. He went to a shop and found a nice looking CD player. Wary of buying inferior goods, he asked the shopkeeper, ‘What happens if this doesn’t work?’ The shopkeeper quietly points to the only sign in English that reads, ‘GUARANTEE NO SPLOID’ Feeling assured, he paid for the CD player and returns to his hotel. He tried to use the CD player after returning to the hotel but it would not even switch on. He quickly returned to the shop and asked for a refund or an exchange for another unit. When the shopkeeper refuses to give either, the man points to the sign assuring him of the guarantee. The shopkeeper says, ‘Brother, you are in China. We read from the right to the left.’

A country preacher had a teenage son, and it was time the boy should give some thought to choosing a profession. Like many young men, the boy did not really know what he wanted to do and he did not seem too concerned about it. One day, while the boy was away at school, his father decided to try an experiment. He went into the boy’s room and placed on his study table four objects. A bible, a silver dollar, a bottle of Jack Daniels and a Playboy magazine. ‘I will just hide behind the door, the preacher said to himself, ‘and when he comes home from school this afternoon, I’ll see which object he picks up.’ If it is the Bible, he is going to be a preacher like me, what a blessing that would be! If he picks up the dollar, he is going to be a businessperson, and that would be okay, too. ’But, if he picks up the bottle, he is going to be a no-good drunkard, and Lord, what a shame that would be. ’And worst of all, if he picks up that magazine, he’s going to be a skirt-chasing bum.’ The old man waited anxiously, and soon heard his son’s footsteps as he entered the house whistling and heading for his room.

The boy tossed his books on the bed and sat down. Finally, he picked up the Bible and put it back down. ‘What the best thing being 104 year-old woman?’ a reporter asked.
‘No peer pressure’ the 104 year-old woman replied.

Joe had asked Bob to help him out with the deck after work, so Bob just went straight over to Joe’s place. When they got to the door, Joe went straight to his wife, gave her a hug and told her how beautiful she was and how much he had missed her at work. When it was time for supper, he complimented his wife on her cooking, kissed her and told her how much he loved her. Once they were working on the deck, Bob told Joe that he was surprised that he fussed so much over his wife. Joe said that he had started this about six months ago, it had revived their marriage and things could not be better. Bob thought he would give it a go. When he got home, he gave his wife a massive hug, kissed her telling her that he loved her. His wife burst into tears, confused, he asked her why she is crying. She said, ‘This is the worst day of my life. First, little Billy fell off his bike and twisted his ankle. Then, the washing machine broke and flooded the basement. And now, you come home drunk!’

**Jokes** are meant for amusement! It employs comedic vehicles like parody, satire and other material referencing, true people, organizations, regions, etc., making fun of them in ways that are obviously not true. Our intent is not to offend anyone! If you believe that jokes could offend you, please do not read them! Despite this warning, if on reading you find, the jokes not to your liking, ignore and move on! Please be aware that they are simply just JOKES!
WHAT IS THE SIM CARD SWAPPING METHOD?
How hackers can get access to your bank account, credit cards and other personal data

The user is called by the fraudster to inform him that his number will be disabled as it is not linked to his Aadhar; is pending KYC verification; or there is a network upgrade by the telecom service and the SIM will not work for a while.

The fraudster then informs the user of a 19-digit code that of the new SIM card which is in his possession and tells the user to send an SMS to 121 with the 19-digit code.

The user receives a confirmation message from the service provider informing him that it has received a SIM change request. He is warned not to proceed if he does not have the new SIM with him. If he wishes to proceed he needs to confirm the SIM change, by replying to the message with "Y".

The user can send NOTSIM to 121 to stop this process.

Despite the warning, when the user responds to the SMS with "Y", he receives a message stating: “Thank you! New SIM will be activated shortly for your mobile number. For security reasons, the SIM service will remain blocked for the next 24 hours.”

Once the update on the SIM card is confirmed, the fraudster accesses the person’s bank account.

He will need the debit card details and expiry to configure the same. This can only be known by the issuing bank or revealed by the customer.

Typically, for the fraudster to get a new SIM card from the service provider and gain access to the user's bank account details, he will also collect a variety of other personal details regarding his target, including the last six digits of the individual’s bank debit card and its expiry date.

This is often procured via phishing emails or by vishing – imitating legitimate business tele-callers (from a bank or cellular service provider). The OTP that gets generated then reaches the new SIM which the cyber thief has, enabling him to transfer money out of the account.

(As explained by Cyber Advocate Vicky Shah)

HOW TO PREVENT SIM CARD SWAP FRAUD

- If you stop getting network connectivity or are unable to use SMS, visit the nearest cellular service store or contact them about the issue via customer care
- Carefully read any messages sent by your network provider referring to SIM changes
- Be wary of opening emails from unknown links. Scammers may use such emails to hack your account and get personal details
- Register for instant alerts (via SMS and emails) that inform you of any activity in your bank account. Check your bank balance and account statements on a regular basis but remember not to save the details online.
- Create strong passwords for all online accounts, especially net-banking. Mix lower case and upper case letters and try and include a number and a symbol.

DOS AND DON’TS ON SOCIAL NETWORKING SITES

Ensure that you verify the account details of the person before providing any information about yourself

Refrain from giving out personal information on networking sites as they can probably be misused

There is always a chance of photographs posted on such sites being misused. So, remember, the fewer photographs the better

Think twice before accepting friend requests. An abusive surfer could write things on your profile that may tarnish your image

There are several sites that help people network through common contacts. If you have a dubious character on your list, someone else may get it touch with that person through you

Do not post abusive content about anyone on networking sites as it is in a public domain and can be accessed by anyone

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