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CONTRIBUTORS



Dr Anupa Gulati
Consultant
Visitech Eye Centre



Vinod Mehra
Accounts



Dharmender Pathak
R & D Department



Ravi Kumar
R & D Department



Najeeb Khan
Business Development



Monish Goyal
Accounts



Rakesh Joshi
R & D Department



Manav Prakash Sharma
QC Department, Roorkee



Nikunj Tomar
Business Development

MESSAGE FROM THE MANAGING DIRECTOR



Dear Friends,

Greetings!!! With the continued support provided by you all, we are celebrating Catalysts 12th Anniversary this year with the launch of our Vision 2020.

With the constant patronage from our customers, we have been growing at a rate of 30% (YoY basis) and we hope to do the same in the coming years.

We will be happy to share that our R&D team is also consistently working towards the diversification of products to help us to improve the outputs of our users. We have also strengthened our distribution network and started a new branch office in Pune. Not only in country but we are also expanding overseas.

Thanks for believing in Catalysts.

Munish Madan

Vision 2020

Catalysts vision is to be a rapidly growing organization and a happy workplace. An integrated biotechnology company; we will evolve as a globally recognized and valued brand. Catalysts will develop a business defined scalable infrastructure pan India and with Global footprints. World class manufacturing infrastructure and accredited research & development facilities will be created to meet the business requirement, for innovative products in existing and new customer base.

We will have a work culture of integrity, respect, team work, ownership, trust, learning and happiness for all stakeholders. Catalysts will be a process driven, professionally managed and people centric organization. We will create Catalysts as a high value business venture with an inclusive growth opportunity for all stakeholders.



Environment, NGT and ZLD

Dharmender Pathak, Research & Development Department



In current industrial scenario, Hazardous waste (effluent) generation is a major point of consideration. In many of the waste (effluent) streams have hazardous substances in it, which is neither disposable on land or water streams nor completely treatable and recyclable. If disposed, such hazardous waste (effluent) directly impacts our environment and also consumes lots of industrial revenue in treatments.

Currently, many government bodies and laws are strictly working on to prevent nature and environment by controlling the disposal of any hazardous waste (effluent) directly (untreated) or indirectly (improperly treated).

The **Hazardous Substances Management Division (HSMD)** is the nodal point within the Ministry for management of chemical emergencies and hazardous substances. The main objective of the Division is to promote safe management and usage of hazardous substances, to avoid damage to health and environment.*

The **National Green Tribunal (NGT)** has been established on 18.10.2010 under the National Green Tribunal Act 2010.**

NGT Act, 2010 is an Act of the Parliament of India which enables creation of a special tribunal to handle the expeditious disposal of the cases pertaining to environmental issues. It was enacted under India's constitutional provision of Article 21 (Protection of life and personal liberty), which assures the citizens of India the right to a healthy environment.**

The legislature Act of Parliament defines the National Green Tribunal Act, 2010 as follows, "An Act to provide for the establishment of a National Green Tribunal for the effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto".**

Currently, waste (effluent) management for ethanol production distilleries is a very difficult task due to strict norms of NGT imposed on these industries for zero effluent discharge. Waste (effluent) of ethanol manufacturing industries is majorly contributed by spent wash with some other streams like water used in washing/cleaning, pantry discharges, etc.

Many of the industries are currently using conventional processes for effluent treatment and their disposal; which includes biomethanation, ferti-irrigation, reverse osmosis and bio-composting. These conventional treatment methods are also not that much efficient to achieve zero discharge. In term to achieve **Zero Liquid Discharge (ZLD)**, most of the industries are focusing on incineration or evaporator technology. This technology evaporates liquid and incinerate solids to achieve ZLD but it also have very difficult and cost consuming processes.

On other hand, recycling of treated effluent within the process is also considerable technology but due to high salt concentration and toxicity in effluent, it is very difficult to recycle the spent wash (effluent) over a limit. The result may vary from none to 10-15% depending on the nature and characteristics of effluent.

This recycle technology will be the future best adaptable technology due to some of the main inherent benefits like:

- Minimize the cost of effluent treatment
- Minimize the cost of capital expenses (CAPEX)
- Minimize the dependency and input cost for fresh water

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- Minimize effluent generation
- Helps to achieve ZLD
- Helps to create better environment for nature
- Energy and Manpower saving
- Carbon credit, etc.

Catalysts Biotechnologies Pvt. Ltd. is working as a pioneer in this direction for increasing recyclable quantity to help ZLD and minimize the treatment cost of effluent.

For a step ahead, Catalysts Biotechnologies Pvt. Ltd. is providing some of the best and environment friendly solutions to increase the recycling of effluent, which directly or indirectly supports ZLD and makes lives better.

Our ranges of products supporting ZLD are:

- **ENZYTTREAT PLUS** (Start/Increase recycling of effluent)
A unique product to improve raw/waste water quality, which directly reduce the toxicity and contamination level hence improving the quality of spent wash. Continuous use of Enzyttreat Plus improves the effluent quality and simultaneously helps to increase the recycle amount of effluent. Proven study states that use of this product helps to recycle the effluent up to >40% (depends on the running quality of raw material and spent wash).
- **ENZYMOL PROTECT** (Preserve/Improve molasses quality)
An ultimate product for molasses preservation. It helps to controls the time-course deterioration of sugar and maintains the quality of stored molasses. This product prevents the toxic substance formation at the time of the short/long storage, thus improves the fermentation efficiency and results in better quality spent wash generation (if contamination prevents within fermentation). Improved effluent quality, finally results in maximum recycling.



References:

*<http://www.moef.nic.in/division/introduction-12>

**<http://www.greentribunal.gov.in/history.aspx>

Advanced Biofuel Can Replace Diesel Fuel

Manav Prakash Sharma, QC Department Roorkie



WHY ENZYMES AND BIOMASS?

Biomass is the main source of biofuel production. Converting domestic biomass into affordable fuels as biodiesel, bioethanol, biohydrogen and biogas, are sustainable and renewable sources of energy, which are also considered CO₂ neutral. In addition, burning biofuels results in reduced levels of particulates, CO₂ and SO₂, emissions compared to fissile fuels. To respond to the increased demand for biofuels, advanced biochemical processes using enzymes are being developed, which are gaining increased global attention. Research in this field aims at improving efficiency and reducing negative environmental impacts of production processes, in addition to enhancing the quality of the produced biofuels. Enzymes have been employed to overcome the drawbacks associated with the use of conventional chemical catalysts. For example, biodiesel production by enzymatic catalyzed processes is less energy intensive and more environmental friendly compared to its production by conventional alkaline catalyzed processes. In addition, the biocatalyst allows using unrefined feedstock, including waste oil, readily without the need to separate the free fatty acids that may be present in large amounts in the feedstock. Another example is the use of enzymes for the hydrolysis of cellulose to produce fermentable sugars

for bioethanol production. The utility cost of enzymatic hydrolysis is much lower compared to the alternative methods of acidic hydrolysis because it is carried out at mild conditions and does not require subsequent treatment step. Indeed, biomass is the only renewable energy source that can offer a substitute for Petroleum based, liquid transportation fuels for the near term. Developing domestic biomass as a clean, sustainable energy resource for transportation. Biofuels offers a range of significant benefits.

(Source: Enzyme Research)

REDUCE GREENHOUSE GASES

Whether it's the melting of the frozen glaciers that shroud Kilimanjaro, Africa's highest mountain, or the overall rise in the level of the oceans, global warming is reshaping the planet. While some people see global warming as a natural event, most scientists agree that fossil fuels, such as oil and coal, drive the temperature increase. When burned, fossil fuels release greenhouse gases, including carbon dioxide, into the atmosphere. These greenhouse gases trap radiation from the sun close to the surface of the planet, causing the planet to warm. Some experts say that ethanol reduces greenhouse gas emissions

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up to 65% Scientists in Australia say biodiesel made from cooking oil reduces greenhouse gas emissions by 87% compared with petroleum diesel.

SUSTAINABILITY

One day the world will run out of fossil fuels, and with it, our main sources of energy will go up in smoke. But biofuels are different. They are made from plants that can grow and be replanted again and again. Perennial crops don't even have to be replanted. Still, not all biofuels are created equal. Some "energy crops" produce more energy than others. For example, rapeseed has a higher oil content than other vegetable plants, which means rapeseed can generate more energy when burned. Perennial plants, such as switchgrass provide an abundant source of power, generating five times as much energy as they take to grow.

POSITIVE ECONOMIC IMPACT

When gas prices in the United States topped \$4 a gallon in the summer of 2008, motorists were aghast. Many drivers began thinking long and hard about buying alternative fuel-powered vehicles, including those that run on ethanol and biodiesel. For example, a flex-fuel car that runs on both ethanol and gasoline gets about 40 miles (64.37 kms) to the gallon, according to the National Highway Transportation and Safety Administration. While fuel economy is one way to measure the economic benefits of biofuels, there are others. For instance, biodiesel production has had a positive impact on the economy. Biodiesel production in the United States increased from 500,000 gallons (1.89 million liters) in 1999 to 545 million gallons (2.06 billion liters) in 2009, adding \$4.28 billion to the gross domestic product. While biodiesel remains more expensive than regular diesel, consumers need to look beyond the cost per gallon to really gauge the economic benefits. Biodiesel vehicles get 30% better fuel economy than gasoline-powered vehicles. Biodiesel creates fewer emissions, including cancer causing benzene and it also produces less pollution by decreasing the amount of particulates suspended in the air less pollution means lower healthcare costs. In addition, as biodiesel becomes more fuel efficient, many businesses that use diesel engines, especially the trucking industry, could see more profits by gassing up with the green fuel.

HIGH QUALITY ENGINE PERFORMANCE

The neat thing about biodiesel is that it can run in existing diesel engines with little or no modification to

the engine or its fuel system. Performance is the same. However, some biodiesel vehicles are sluggish in cold climates. Since most vegetable oil is high in saturated fat, ice crystals tend to form in the biodiesel causing a vehicle's engine to struggle. However, biodiesel made from certain types of vegetable oil, such as canola (a form of rapeseed), is lower in saturated fat, which makes it harder for ice to form in frigid temperatures. Biofuels help engines last longer, too. Oil has a high viscosity rate. Tests show that high biodiesel blends above B10 (10% biodiesel, 90% petroleum diesel) do not impact the vehicle's engine performance.

ECONOMIC DEVELOPMENT

In addition to reducing dependence on foreign oil, many countries expect the biofuel industry to fuel economic development in poor, rural areas. For example, experts at the International Food Policy Institute (IFPI) says that in Tanzania, ethanol made from a shrub called Cassava can help to reduce poverty in that West African nation where 80% of the labor force is farmers. Tanzania is one of the poorest nations on the planet. According to the IFPI experts, government investment in the biofuel industry might lower Tanzania's poverty rate by 5% in the next 10 years. However, there is a downside. Shifting crop production from food to fuel could cause a decline in food supplies and a spike in prices. As a result, government need to pay attention to how biofuel crops are grown to ensure an adequate supply of both food and biofuel crops.

REDUCE FOREIGN OIL DEPENDENCE

In 1973, the oil producing nations of the Middle East stopped exporting oil and therefor oil prices rose. Economies across the globe suffered. In the United States, people waited in line for hours to buy what little gasoline there was. The embargo was a cold slap in the face to the rest of the world. Governments scrambled to find new ways to deal with the energy crisis. Eventually the oil producing countries lifted the embargo, but our thirst for oil continued. Today, humans consume 85 million barrels of oil a day. Americans use nearly 18.7 billion barrels a day. While growing sustainable energy crops at home will lessen the nation's reliance on foreign oil, most experts agree it will not solve our energy woes in one blow. Instead, biofuel use, coupled with long and short term solutions such as raising fuel economy standards for motor vehicles; enacting tax incentives for hybrids and fuel-cell vehicles; and increasing the use of all renewable

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fuels will help the United States and the world wean itself off oil.

FUEL ECONOMY

Vehicles that run on biodiesel get 30% better fuel economy than gasoline-powered vehicles, which saves drivers money every time they visit the gas station. In 2006, the Toledo Area Regional Transit Authority (TARTA) in Ohio and The Intermodal Transportation Institute at the University of Toledo began a three-year fuel comparison study to determine the fuel economy of B₂0 and conventional diesel. Preliminary results showed that some of the biodiesel buses created less pollution, had lower maintenance costs, and had a 5 to 8% increase in miles-per-gallon.

HEALTH BENEFITS

Each year in the United States, 10,000 people die from pollution created by gasoline engines (Source: Reilly). Among other irritants and pollutants, gasoline releases nitrogen oxide and acetaldehyde. Acetaldehyde molecules react with sunlight to form smog. These emissions make thousands of people sick every year with respiratory ailments and cancers. Biofuels discharge fewer toxins into the air than fossil fuels. When compared to conventional diesel, biodiesel reduces smog-forming particulate matter, which reduces cases of asthma and other respiratory illnesses. In addition, biodiesel doesn't emit any sulfur oxides and sulfates, which contribute to acid rain.

For its part, ethanol generally burns better and more robustly than gasoline, generating less pollution. When compared with gasoline, an E85 fuel blend (15% ethanol, 85% gasoline) burned in an efficient engine produces fewer toxins, including 40% less CO₂; 20% less particulate matter; and 80% fewer sulfates. However, scientists at Stanford University in California say ethanol releases many of the same pollutants as gasoline. In addition, a large amount of unburned ethanol escapes into the air, forming acetaldehyde molecules and ultimately smog. But, engines fueled by ethanol emit fewer cancer-causing substances than gasoline.

BIODIESEL IS BECOMING MORE ENERGY EFFICIENT

In a car or truck, petroleum diesel is currently more energy efficient than biodiesel, but things are changing. According to the U.S. Department of Energy, the energy content of a gallon of diesel is 11% more than the energy content of a gallon of biodiesel. With all things being equal, a truck running on a mixture of 20% biodiesel and 80% diesel gets 2.2 miles fewer miles per gallon than a truck running on just diesel.

(Source: U.S. Department of Energy)

Nevertheless, biodiesel is more energy efficient than gasoline. In addition, producing biodiesel is becoming easier and more energy efficient. How so? Researchers at the University of Idaho and the U.S. Department of Agriculture say for every unit of fossil fuel energy needed to grow and refine soybeans into biodiesel, four-and-a-half units of energy are gained. In comparison, for every unit of fossil fuel needed to produce petroleum diesel, the return is less than one. Researchers say that farmers and refineries are using less fossil fuel and better production methods to turn soybeans into energy-efficient biodiesel.



ORGANIC AGRICULTURE AS A TOOL FOR SUSTAINABLE DEVELOPMENT

Rakesh Joshi, Research & Development Department

Organic Agriculture in India



WIDER MEANING OF ORGANIC FARMING:

Organic farming is an approach to agriculture where the aim is to create integrated human, environmentally and economically sustainable agricultural production systems. In organic, maximum reliance is placed on local or farm derived renewable resources and the management of self-regulating ecological and biological processes and interactions in order to provide acceptable levels of crop, livestock and human nutrition; protection from pests and diseases; and an appropriate return to the human and other resources employed. Reliance on external inputs, whether chemical or organic, is reduced as far as possible. Organic agriculture is also known as Ecological Agriculture, reflecting the reliance on ecosystem management rather than on external inputs. The term 'organic' is best thought of as referring to the concept of the farm as an organism, in which all the component parts—the soil minerals, organic matter, micro-organisms, insects, plants, animals, and humans—interact to create a coherent and stable whole. The key characteristics of organic farming include protecting the long-term fertility of soils, providing crop nutrients indirectly and using the action of soil microorganisms; effective recycling of organic materials, including crop residues and livestock manures; controlling weed, disease and pest by relying primarily on crop rotations, natural predators, diversity, organic manuring, resistant varieties and use of limited thermal, biological, and chemical interventions; and the extensive management of livestock.

There is now not only enough evidence to show the adverse impact of conventional farming on health and environment, but also national-level calculations of the cost of environmental externalities from conventional agriculture. Being driven by principles that internalize sustainability, organic farming is an important leader in the search for alternatives to a world that has been largely driven by a ruthless search for profit under intense cost-price pressures. It is incomprehensible, therefore, to reject organic agriculture out of hand as being ideological.

The organic movement represents a positive moral force in a world that is rapidly sliding into crisis because of market fundamentalism, technocratic thinking and opportunism by the powerful at the expense of the poor. The research on resource dilemmas, the role of neoliberal economic thought in agricultural research, and the

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implications of the fact that humans have become a major force of nature may now be convincing evidence to show that the organic agriculture movement is an important tool in the battle for a sustainable future. We have focused, in the industrial era in particular, on production of food, fuel, and fiber as the main commodity outputs of land use. In doing so, we have ignored the increasing need to cultivate and nourish the ecological services on which we and other higher life forms depend. These ecological services include the provision of food, fuel and fiber; a stable climate; protection against cosmic rays; the provision of clean and safe drinking water through healthy hydrological systems; an effective carbon cycle, including carbon sequestration; biodiversity, including insect pollination and keeping in check pathogens; purification of the air; etc. The perceptions of many about the so-called inefficiency of organic agriculture lead us to think that it will require more land and therefore, destroy more nature than 'efficient' conventional agriculture. This thinking undervalues farming as a constituent of healthy ecological services. We can no longer afford to ignore the need to actively manage ecological services. From the perspective of ecological services management, organic agriculture has advantages over conventional agriculture.



Healthy Lifestyle: Formula of 80 for living up to 80 years

To live above the age of 80 without a heart attack, one need to have ideal health parameters and life style and both can be remembered with the formula of eighty.

HEALTH PARAMETERS

In order to achieve this, it is advisable to maintain fasting blood sugar (FBS) (mg%), fasting low-density lipoprotein (LDL) bad cholesterol (mg/dL), diastolic lower blood pressure (mm Hg), resting heart rate, and abdominal girth (cm) all below 80. Apart one should also keep the kidney and ling functions above 80.

1. Diet:

Eating fewer calories has been shown to reduce the chances of developing heart attack. One gram of food contains six calories on an average (9 grams in fat, 4 each in carbohydrates and proteins). One should not eat more than 80 g or 80 ml of caloric food in any meal.

Also it's a Vedic saying that one should not eat cereals (wheat, rice) for up to 80 days in a year and was the basis for Vedic spiritual fasts. Eating cereals every day especially the refined carbohydrates (white sugar white maida and white rice) is responsible for high insulin levels with insulin resistance.

2. Exercise:

Adequate walking cum exercise duration per day is 80 minutes. Cardiovascular training exercise involves walking 80 steps a minute for 80 minutes a week. Cardiovascular exercise involves attaining 80% of target heart rate (220- age is 100% target heart rate).

3. Time to yourself:

One should give atleast 80 minutes of time to oneself in a day (includes time for meditation, getting absorbed in the present work, relaxing, fulfilling your hobby etc). This can also be done smiling and laughing when ever an opportunity arises to 80 times a day.

4. Pranayama:

One should do 80 alternate nostril pranayama a day. Or one should do 80 UMMMMM chanting a day.



5. Alcohol:

For those who consume social drinks (with no contraindications) the dose is less than 80 g in 1 week (10 g is 30 mL 80 proof whisky). In women, it is 80 g in 2 weeks. Also one should not take more than 80 mL of whisky in 1 day (males). For females it is half of that of males.

6. Clapping:

Those who believe that clapping is good for the health should do 80 clapping a day.

Source: Dr. K K Aggarwal

CATARACT-ALL YOU WANT TO KNOW

Dr. Anupa Gulati, Consultant, Visitech Eye Centre

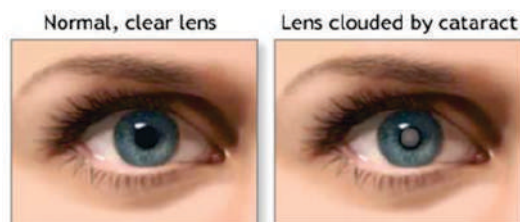
WHAT IS CATARACT

Cataract is a clouding or opacity of the normally transparent lens inside the eye, preventing the light rays from passing into the eye. It is a part of the normal ageing process and hence is seen commonly in patients above 50 yrs of age. Cataract is managed by surgery which involves removal of the natural opaque lens and replacing it with an artificial Intra Ocular Lens (IOL).

With the advancements in instrumentation and techniques, cataract surgery has become a very reliable, safe and successful procedure with early visual recovery.

CAUSES OF CATARACT

- Commonest Cause: Senile/age related
- Other causes:
 - Trauma
 - Congenital (By birth)
 - Complicated: Due to other eye diseases like Uveitis, High Myopia
 - Secondary: Diabetes, Steroids, etc.



A cataract is an opacity of the normally clear lens which may develop as a result of aging, metabolic disorders, trauma or heredity

SYMPTOMS OF CATARACT

- Progressive, Painless decrease in vision
- Frequent change of glasses
- Problem in reading and/or driving, glare
- Advanced stages: White reflex at the pupils

TREATMENT OF CATARACT

There are no medications, eye drops or exercises that will cause cataract to disappear once formed. Surgery is the only way to remove a cataract.

- Safe, simple and Day care surgery, taking 10-15 minutes
- Remove the opaque lens and replace it with foldable Intra Ocular Lens (IOL)
- Done by Phacoemulsification (Phaco) through a Micro Incision (MICS), and is suture less

WHEN SHOULD ONE GET OPERATED FOR CATARACT

The timing of cataract surgery largely depends upon the needs of the patient. When the vision loss due to cataract is significant enough to hamper routine activities, the cataract can be operated upon. In fact, a more advanced stage of cataract is sometime difficult to manage using the suture less technique.

- Early Cataract with good vision: Can defer surgery
- No need to wait for Cataract to 'Mature'
- Earlier surgery gives better results
- Most of the cases, we let the patient decide
- Sometimes, earlier surgery may be advised, especially when Cataract interferes with treatment of Retinal diseases

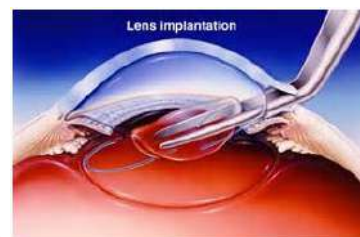
POST OPERATIVE PRECAUTIONS

There is no restriction in reading, watching TV, computer work, walking or eating any type of food. Patients can resume office work within a few days after surgery.

- Prescribed eye drops to be used for 4 weeks
- Advisable not to splash water/rub the eye for 2 weeks
- Avoid dusty conditions for 2 weeks
- Avoid Yoga/Gym exercises for 2 weeks

NEWER DEVELOPMENTS IN CATARACT SURGERY

- Bladeless Cataract Surgery: Femto Laser Assisted Cataract Surgery (FLACS)
- MICS: Phacoemulsification performed through smaller incision of 1.6mm in size
- Multifocal IOL: Providing correction for near & distant vision thereby significantly reducing post OP dependence on glasses
- Toric IOL (Corrects Astigmatism/Cylindrical Power also)



BEWARE!

EXCESSIVE USE OF MOBILE PHONES MAY LEAD TO ARTHRITIS



Do you feel pain in your thumb, fingers or wrist after texting or playing a game on your mobile phone? Well, there are chances that you have torn tendon of your thumb. Not only this, in worst case scenario, you may even end up having arthritis.

Recently, a California-based 29-year-old man tore tendon on his thumb while playing game on his smartphone all day for more than six days.

Doctors say with increased use of mobile phones, people are becoming vulnerable to stress related injuries. '*Smartphone thumb* or *Blackberry thumb*' is a phrase that is used to describe the pain in the thumb after over use of the smartphone.

"It is a repetitive stress injury which results in pain when the wrist or thumb is bent towards the little finger. Also there may be a dull ache in the base of the thumb and snapping each time the patient bends and straightens the thumb. The causes of this are that the keyboard is little and the hands are doing two things together i.e. holding the phone as well as typing in the awkward position. These stresses lead to early wear, tear and degeneration," said Dr Akash Sabharwal, Consultant, Orthopaedics and Sports Medicine, Moolchand Orthopaedics Hospital.

The tendons of the thumb are under maximum stress, which leads to tendinitis or tenosynovitis (inflammation in the tendon sheath). Repetitive stress can lead to arthritis in the long.

Dr Sabharwal said, the problem is mostly seen in younger people and is spreading among teenagers also as they spend much time on phones these days. "I receive about four to five cases per week where the symptoms in the thumb and wrists are primarily related to smartphone or tablet usage in excess. Repetitive stress can lead to arthritis in the long term specially affecting the small joints of the thumb," he informed.

Not only thumb, but pain in other body parts like elbows and shoulders can also arise. "Long term effects of radiation waves on the brain are well known. The Federal Communications Commission (FCC) has suggested to keep a distance of minimum 20 cms to reduce radiation exposure." said Dr Sabharwal.

Another common practice that people have is holding their phones while walking. This also increases pain in their wrist. The repetitive stress on wrist can also lead to irreparable damage. Meanwhile, doctors say that limited use of phones and using a regular sized keypad can minimise the pain and stress-related injury.

"Hold phone with one hand and use the other hand index finger for typing rather than your thumb. Take intermittent breaks if you feel the discomfort and gentle stretching of the fingers and thumbs intermittently will also help." suggested Dr Sabharwal.

Try using headsets, if you are on a call for long hours and in case of chronic pain, seek help from an upper limb orthopaedic expert.

Source:
<http://www.businessinsider.in/>

6 Habits Financially Stable People Have

Vinod Mehra, Accounts Department

Keeping your financial life stable requires some discipline and development of good financial habits. We all do not want to be in a financial hole that leaves us emotionally and psychologically devastated. It is better to protect our finances when we can, before situations cause our money to slip away from our fingers.

Identify everything you pay money for as a “want” or a “need”. Reduce what you pay for “needs” whenever possible and eliminate as many “wants” as you can.

Here are 6 important habits to learn from the financially stable people:

1. DON'T SPEND IMPULSIVELY

This apparently happens to be a bigger problem for all of us as we want to take advantage of the “easier” life. Impulsive spending means eating out and shopping extensively until we drain our finances. Financial stability can only be attained when we control and monitor our spending.

2. SAVE MONEY

Financially stable people spend less than they earn. You may not have abundant capital but you can build it while indulging in the right and important things and not by overspending. Learn to negotiate or simply reduce your spending on grocery, restaurants and clothing.

3. TRACK SPENDING

Monitor your spending. This can be done occasionally. Perhaps once a month you can write how much you have spent and see what areas you are running deficient. By doing this activity you can monitor how efficiently you are using your finances.

4. INVEST

Financial stable people do well to secure their future. Even when retirement is far away you can start setting some money outside in deposits for investments.

5. ELIMINATE AND PREVENT DEBTS

All debts are not the same. A loan that builds with high interest is not the same as low interest loans such as mortgage and student loans. Debt has a psychological effect that works against the debtor so it is better to eliminate or prevent debts. Know how much you owe now, whether it is a car loan or credit card debt.

6. BUDGET

Financially stable people budget their income. By using a budget they are able to ascertain where their money is going and are also able to ensure their future safety.



10 Questions You Should Ask Before Buying Term Insurance

Monish Goyal, Accounts Department



TERM INSURANCE is a type of life insurance policy that provides coverage for a certain period of time or a specified "term" of years. If the insured dies during the time period specified in the policy and the policy is active or in force, then a death benefit will be paid.

Term insurance is initially much less expensive when compared to permanent life insurance. Unlike most types of Permanent Insurance, Term Insurance has no cash value.

There are many different types of Term Insurance policies available. Many policies offer level premiums for the

duration of the policy, such as 10, 20 or 30 years. These are often referred to as "Level Term" policies. While premiums for these level term policies remain level for a set number of years, after this time period the premium increases significantly, making the policy cost prohibitive.

There are various doubts faced by customers when it comes to buying a Term Insurance plan. They get confused, whether or not they would get cover outside India. There are some who worry about the validity of their policy if they start smoking after purchasing insurance. These are some of the many questions that crop in our mind when we have to purchase a term plan.

All the doubts and queries must be cleared prior to buying a term plan.

1. Would the premium of a term plan bought today, change in the future?

Unless such a clause is specifically mentioned in the offer document, premium of a term insurance is to remain the same through the whole term of the policy; provided no change is brought up in by the policyholder himself/herself. Meaning to say, the policyholder must not develop any disability or any (life threatening) smoking/drinking habit. On declaration of any such developments, company might apply loading (Premium rise) and thus the premium would hence change.

2. What would happen if a person starts smoking after few years of purchasing the policy?

If the policyholder has got into the habit of smoking or drinking or the habits that might reduce their life expectancy after buying the policy, they have to necessarily reveal this fact to the insurance provider as they are now part of a different risk pool. Otherwise, the company may impose loading (increase in premiums) on the existing premium or may even cancel the policy. It is important for the insured to inform about any such changes to the insurer, as breach of this clause could lead to decline of the claim in extreme cases.

3. Would the policy cost more if a person has Smoking history?

Varies from policy to policy, for example, the Kotak Life Insurance proposal form mentions that the client has to disclose if he was a smoker or drinker earlier also when was it that he left it. Max New York Life Insurance for its Platinum Protect (Term Insurance) accepts people, who have not smoked in at least 3 years, as non-smokers. Be sure to check companies' rules.

4. Is Term Insurance Claim Successful in case of Accidental Death?

Term insurance does pay in the event of an accidental death as well. Irrespective of what the reason is, the sum assured or cover amount would be paid on the insured's death (natural or accidental, or death due to some illness). There are various riders (additional benefits) such as accidental death benefit, permanent disability rider and critical illness rider that could give a boost to your term plan. By buying/attaching these riders to the policy, a policyholder can be certain that his nominee will get an amount over and above the basic sum assured (due to any of the rider-related incidents).

5. Is Life Insurance considered valid, if death occurs outside India?

Yes, term plans are very much valid, even if death happens outside India. The policyholder must have communicated this fact to the insurer. He should inform the insurance provider that he now lives outside India. Just like change of coordinates like phone number, address or nominee, there is a provision in the policy service using which the policyholder has to state that he is going abroad. However, if he is migrating to a country that is considered as unsafe like Pakistan, Burma, Somalia etc, then the company will defer this facility. Otherwise, this cover is valid in other foreign countries like US or UK.

6. What If I don't die?

It is general tendency of people to get upset on finding out about the no maturity benefit in their Term policy. If it concerns you, then you must try to understand what changes your policy might go through when it nears the end of the term.

- **PREMIUM RISE:** Many term policies do not experience any raise in the premiums for several years (10, 20 and even 30 years, for example). As soon as you approach the end of that term, you may get the option of retaining your policy. If you do, you can expect a great rise in your premium.
- **LESS COVERAGE:** You always want your policy to cover you till the time you have liabilities to pay like a mortgage, or your children's college education. If those are your needs and you have no other obligations to worry about, you might not want to renew your policy.
- **POLICY UP-GRADATION:** Most term policies offer a "conversion privilege". This lets you to exclusively trade in your old term policy for a new permanent policy.

7. How does claim settlement work if a person has more than two policies?

In such cases, it is primarily important to declare in the proposal form that you already possess a policy from an ABC company. (There is a separate column in every company's proposal form, which a client has to fill if he has another policy from the same or a different insurer). The form should be submitted after providing such necessary information. Then at the time of claiming the policy, the general practice must be to submit the Death Certificate to that insurance company with which the policy has been running for the longest time. After wards, other companies must be informed of the procedure due and an acknowledgment from the FIRST Company should be offered to them and then accepted by other companies. However, lately, it has been observed that majority of insurance companies do not ask for an original death certificate to settle the claims; a photocopy of the certificate works well too. So be vigilant while filling the form and provide all the information about your previous policies to prevent even a minor problem later on.

8. How good are Insurance companies in investigating death?

There is a distinction between early claim and normal claim. If a claim happens within the first two years of purchasing the policy (This period is different for every insurer), the company does thorough investigation before settling the claim. It is essential as for the company too much is at stake. For e.g, if someone has taken a sum assured of Rs 50 lakh and pays Rs 7,000 annually (if he has taken this policy on a per month

basis, he pays around Rs 600 monthly), then the company has a lot to lose. Hence, the company will doubly verify everything before settling the claim. In normal claim, premiums are paid periodically and the policy is in force for a long period, say 12 to 15 years. In these cases, getting a claim is easy.

9. What are the deaths that term insurance does not cover?

Many of the buyers are ignorant about the fact that “Deaths due to Terrorist Attacks” are not covered under term insurance. Such claims may get settled on humanitarian grounds later on when the nominee contacts the Insurance Regulatory and Development Authority (IRDA) but the clause is excluded in most companies. Another thing, Natural calamities or act of God like earthquake/tsunami aren't covered either. As in such disasters, casualty is high and the claim to be settled runs in hundreds of thousands of rupees which is impossible to settle by the company at once. Therefore, one must remember to clear these facts while buying a term insurance.

10. Are NRI's allowed to buy Term Insurance?

Yes, NRI's can purchase term insurance plan but they need to be a resident of India as the insurance company requires certain documents like address/ age proof which should prove that you belong to some place in India. And for this purpose, the individual is not required to visit the company; he/she can directly purchase it online or through written communication while sitting in a foreign land. Also, he can purchase and the policy and submit the documents, last 3 years ITR and medical test reports in his next visit to India.

Source: Policy Bazaar.com article

The Clandestine to Meeting the Principle behind Your Goal

Najeeb Khan, Business Development

“If you fail to plan, you plan to fail”

A life without objective or goal is like living for nothing and ultimately failing at every step you take. Everyone has a goal, an objective in their life. Building a goal in life is important and achieving that goal makes you feel contented. When you plan your goal in life you also clarify your results focusing on your target. Once you know what your target is, you must then find out the purpose of achieving that target.



Goal in life is important but a goal with purpose is much more important. Having compelling reasons to achieve your goal will lead to a positive motivation to attain the desired results. You can dream to be big but having reasons to drive yourself to achieve that stature in life is worth dreaming.

Finding the purpose of your goal is important to keep you going until you achieve it. Even if you fail in your first attempt, these reasons will serve as a drive for achieving your goal. The purpose of your goal is the motivational and emotional factor to push you to do everything to make your dream a reality.

Here are a few questions that all can ask yourself to find that “why” of the goal in your life:

- Why do I need to do this?
- What is the real rationale behind this task?
- What will I get in return from achieving this?
- How will I feel after achieving it?

The purpose of your goal are the compelling reasons why you have set that goal in life. They are the reasons to give you the necessary push to follow up your ultimate plan.



WHO WANTS TO BE A CEO?



TAKE OWNERSHIP

Irrespective of your title or position in the hierarchy, act and behave as if you own the business. Start thinking like the owner. Don't be a manager of resources; be resourceful.

YOU DON'T GO TO WORK

You don't go to work any more. Remember that. You are there to commandeer resources and build something bigger than you. So forget your peeves about peers, whether you are being paid the market salary, whether your cabin is big enough or whether you ought to be promoted early.

Winning professionals go to the front, grab tough assignments with both hands and build a venture out of a project. Don't treat your next assignment as a task. See whether you make it something that has a far-reaching impact on the organization. The results will follow.

BE AWARE, VERY AWARE

They don't work 9am to 5pm. They spot inconsistencies, are constantly curious about competition, customers, regulators, trends and always trying to smell an opportunity or spot a crisis before it comes. They don't have a set formula. Instead, they are always ready to pivot and rework strategy to get ahead.

SOMEBODY IS WATCHING

Operate at all levels. Cut through the chain of command. An entrepreneur knows that to effectively steer his business, he needs to have his finger on the pulse of the business. He's not constrained by his cabin, but is on the shop floor. No job is too small or too big for him. He aims to inspire people he works with, not manage them.

CREATE YOUR OWN CLOCK

Outcome, outcome, outcome. Entrepreneurs don't care much about activity. They are their worst critics and ensure they do everything to move the needle.

BREAK THE RULES

Entrepreneurs structure their businesses and teams around the problem. They refuse to live with hierarchy. Roles and responsibilities are assigned based on the demands of the business, where situations dictate the structure.

You will find your organization has built a method of approaching a problem. Sooner or later, these methods get out of sync with market realities and nobody notices. You need to be the one who watches out for myopia that's creeping into the place you work.

KNOW THYSELF

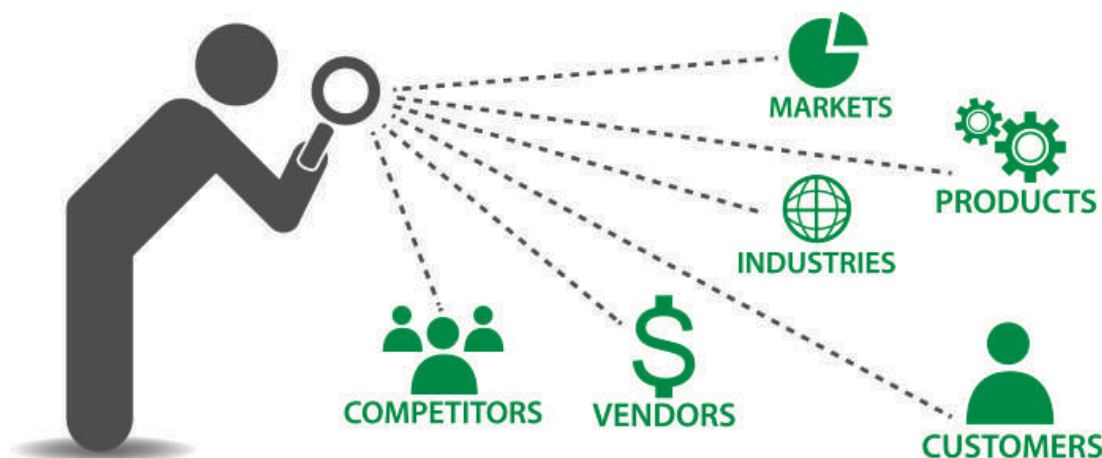
Develop your self-awareness muscle. All battles are first fought in the head. Take ownership of managing yourself, and only then try to manage others. The successful professional entrepreneur combines curiosity, humility and passion, and a willingness to try harder than the next guy.

If you don't want to be a middle manager for the rest of your life, start behaving like an owner.

Source: Harsh Chawla, Mint Newspaper

Market Intelligence

Nikunj Tomar, Business Development



3 STEPS TO POWERFUL MARKET INTELLIGENCE

Take a minute to think what it would be like if you had just a handful of customers and you intimately knew everything there was to know about them from their names and personal background through to their differing business needs. Just like a market trader who has a continuous finger on the pulse of customer preference, direct contact with customers allows a business owner to quickly evaluate what he is doing right or where he is going wrong. Such informal feedback is valuable in any company but hard to formalise and control in anything much larger than a corner shop.

However, it is also just as important to have information on your competitors and potential customers as it is to have information on your existing customers. Having intelligence on your enemy is a key to winning military battles and so it is in business.

Market intelligence can be used to assist with more or less every decision faced by a company (whether they are operating on a local, regional, national or international level). The overriding purpose of most market intelligence is to help the company grow—to increase revenue, profit, or market share.

The problem is that with the advent of the Internet and so much information at our fingertips, sometimes the difficulty is knowing where to start.

STEP 1: DON'T REINVENT THE WHEEL

There is no point reinventing the wheel if the information we are after is already under our noses. However, the problem normally is that very often people either don't know the information exists or they don't know how to locate the information in the particular format they are looking for.

The best starting point for any project is to get key personnel from different backgrounds of the business to take part in a workshop-type format (from board level down, encompassing marketing, sales, operations, HR, technical, logistics—the whole business). This type of meeting can be very rewarding to assemble knowledge on customers, potential customers and competitors that otherwise would be held in individuals' heads. Using this workshop format also helps clarify what external information has been collected previously and therefore obviates the need to spend money on collecting the information again (gone are the days of Market Research Managers within large corporates who used to know what primary research had been commissioned in the

CAREER TIPS

past). A huge amount of learning can be gathered using workshops, especially if guided by a skilled external moderator.

Following this workshop output there will no doubt still be gaps in intelligence but there is no need to spend vast amounts of money on primary research. The expert desk researcher can quickly and inexpensively dig out data from a wide variety of sources to answer many of the questions that have already been asked. With the recent explosion of social networking, this too has resulted in a lot of information that can be quickly gathered inexpensively. This is not to say that it will definitely be correct, but information that is in the public domain has at least been subjected to the test of public scrutiny and it can be then challenged internally to help judge its accuracy.

STEP 2: CHOOSE YOUR BATTLEGROUND

Desk research can be very fruitful. However, it has its limits and it may only provide part of the information sought in a project. Where a mix of desk and primary research is used it therefore means that more expensive primary research techniques are used only where essential.

The next step is to clearly state what your key objective is for your business plan and the actions you will take as a result of gathering the market intelligence.

Information can be gathered from speaking with many different respondents including:

- **INTERVIEWS WITH CUSTOMERS**

These are arguably the most important interviews of all as they are the lifeblood of your company. There is no more effective, reliable or valuable source of competitor intelligence than customers. Buyers have never been so willing to say exactly what they want, and how they want it, nor so willing to complain or take their business elsewhere if their requirements are not fulfilled. Customers often display a remarkable level of candour when talking about their suppliers, even those with whom they have a close and collaborative relationship. Issues as diverse as price, service, contractual details and technical information can be discussed, as well as information on the competition and future needs.

- **INTERVIEWS WITH POTENTIAL CUSTOMERS**

These interviews are often very important to see what market perceptions are like 'on the other side of the fence'. Potential customer interviews can be used to ascertain brand perceptions in the marketplace, why they choose the supplier they do and what could make them switch to another supplier. These interviews are also useful to ascertain how much demand there is for a product/service so market sizing estimations can be made.

- **COMPETITOR INTERVIEWS**

Competitor interviews are a difficult, but valuable means of gaining competitor intelligence. Clearly senior management such as Marketing VPs are particularly useful sources of information, if they can be persuaded to talk. Gaining co-operation with such groups is one of the most difficult tasks carried out by research and intelligence agencies. If the agency can avoid revealing the sponsor of the survey (this is very rare), a financial incentive may gain co-operation. Far more commonly, the respondent is happy to take part in an 'information exchange'. This usually results in the respondent receiving a synopsis of the overall market research findings in return for a face-to-face or telephone interview. It should be highlighted that a competitor interview does not necessarily need to target a high-level respondent in order to be useful. Mid management employees such as sales managers can be an extremely useful source of information on products, innovations, overall strategies and a host of other topics. These employees are trained to talk and persuade and tend to be less circumspect than their colleagues in other departments.

CAREER TIPS

• INTERVIEWS WITH SUPPLIERS, DISTRIBUTORS AND INDUSTRY EXPERTS

In every industry it is worth mapping out the supply chain in order to assess who might be able to provide valuable market intelligence. Those at the centre of the supply-chain—intermediaries such as distributors, agents and importers – are often those that know most about the market, as they are in frequent contact with manufacturers and sellers alike. Most markets have a number of ‘experts’ of some kind who are independent and willing to share the information they possess. Industry associations and journalists at industry publications are typical examples.

STEP 3: DON'T STOP DIGGING

One of the most important things to remember is that the gathering of market intelligence is delivering insight into a market at that specific moment in time. Many of the issues that affect a customer's buying decision today will most likely evolve in the future. Also, in this global marketplace in which we all play, change is constant and so not only will needs change but suppliers, prices and products will also change. Therefore, it is not only important that intelligence is acted upon when it is collected but that also a constant review (or feedback loop) is put in place so that a continuous review of market intelligence is at the centre of all business decisions made.

CONCLUSION

For many companies, the first place to look for more sales and therefore growth is among existing customers. Current customers have already made the ultimate gesture of approval and paid money to buy your products. A bit more persuasion and they may buy more. Also, existing customers know and trust the company sufficiently well to do business. So much so, they may give serious consideration to buying a new product or service from the company. However, every company has a product that can travel. New markets wherever they are—new countries or new segments—carry risk and the gathering of accurate market intelligence is a must in making all these decisions.

Source: B2B

KIDS CREATIVITY



Aayush Srivastava, Class 6
S/o P D Srivastava



Vaishali Saini, Class 6
D/o Pradeep Saini

SPORTS AND YOUR CHILD



HAVE YOU EVER THOUGHT OF THE IMPORTANCE OF SPORTS FOR OVERALL DEVELOPMENT OF YOUR CHILD?

Sport can have an extremely positive influence on children and the benefits of sports can be long lasting. When kids play, they keep fit and healthy, develop new friendships and learn how to work as part of a team. These are all important things that will help your little ones as they grow up into adults!

Remember the proverb—"All work and no play makes Jack a dull boy".

Sports play a pivotal role in the makeup of a young champion. Where else can a young, impressionable youth learn values like discipline, responsibility, self-confidence, sacrifice and accountability? Television, which may be the most influential tool in the lives of young adults, does not show enough of these qualities, nor is it on the Internet, or radio. Rather it is up to the parents, teachers, sports teams, clubs and after school programs to help mold, develop and instill these qualities into the lives of children!

HOW SPORTS HELP YOUR CHILD

- Helps to build up their self-esteem and improve their mental health
- Allows learning to trust their own abilities and push themselves
- It helps children to accept constructive criticism and use it to their benefit
- It is no surprise that children who participate in athletics excel in academics as well as they learn to apply the same principles of dedication and hard work learned through sports participation to their studies
- Kids learn social skills, leadership, team-building and communication skills for life
- They learn to cope with difficult situations and overcome inhibitions
- They are good diversions and give them energy to learn their lessons well
- Participation also can teach children the benefits of setting goals and achieving them

IMPORTANCE OF TALKING ABOUT SPORTS IN YOUR HOUSEHOLD

- Inculcate an interest in sports in your child
- It is possible to teach mathematics through scores and statistics of games
- Teach your child the importance of team work
- Teach your child how to handle success and failure, appropriately
- Helps you bond with your child better, finding common interests
- Growing up, it makes an archive of events and timeline for your child. When they are your age, they would look back and remember what-happened-that-year by associating it to happenings you discuss with them, including sports!



Source: <http://www.jaipuriaschools.ac.in>

12th Anniversary Celebration on Jan 4, 2015 at Lemon Tree, Ghaziabad



Song by Mr. Munish Madan (MD) & Mr. Aditya Malhotra (Director)

Baney chahe dushman zamaana humara,
Salaamt rahe Catalysts parivar ka pyar humara,
Koi humse poochey to kehte hain hum,
Ek doosrey ke dil mein rehte hain hum,
Wo struggle ke din, Wo establish hone ke din
Wo anxiety ki ratein, Wo excitement ke din
12 saal hum sab ne gujarey yahaan,
Yaheen saath milke Catalysts ko kiya jawaan,
Thaa Safar bada aashiqana humara,

Salaamat rahe Catalysts Ka pyar humara,
Na bechdeyngey kabhi bhi na hum doston,
Humein Catalysts ki kasam doston,
Pataa koi poochey to kehte hain hum,
Ke ek doosrey ke dil mein rehtey hain hum,
Nahin Aur koi target vision humara,
Salaamat rahe Catalysts ka pyar humara,
Baney chahe dushman zamaana humara,
Salaamt rahe Catalysts parivar ka pyar humara!

EMPLOYEES ZONE

T.T. Tournament, Employees Engagement Program



FUN ZONE

Spot the difference

There are 15 differences in these shots. Can you find them?
Send your entries at info@thecatalystsgroup.com to win a surprise gift.



Filmy Challenge

Guess the 12 Songs from the given emoticons/smiley/stickers/symbols and send your entries at info@thecatalystsgroup.com to win a gift.

- 1) 🖐️ ne 🖐️ 🏃 aur ❤️ 🔔
- 2) 🧑 🧒 🖐️ 😴 di
- 3) 4 🍼 🍺 🦻 🖐️ 🌹 ka
- 4) 🚰 🤢 ❤️ ke 🦻 ho 🖐️ 🖐️ te
- 5) 🖐️ 🚦 🛠️ ❤️ li 🖐️ 🧑 🧑 😴 ke
- 6) 1 2 3 4 🐕 on 🧑 🌸 🌻

- 7) 🖐️ 🎨 🍷 ka 🖐️ 😊 🗺️ ka 💧 💧
- 8) 🦻 raha 🖐️ 🤔 hu 🖐️
- 9) 🦻 🦻 🦻 🖐️ 🚗 🖐️
- 10) 🖐️ 🎈 🎈 ? hai, 🖐️ 🎈 ? ? hai
- 11) 🖐️ 🖐️ me 🖐️ 🖐️ hai, 🙏 🌟 🖐️ 🧑 hai
- 12) ✖️ m 🌀 🖐️ 🖐️ 🖐️ 🖐️