Sciphon

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St. Mary's College (Autonomous), Thoothukudi.

Learn . Launch . Lead

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Let's Explore...

Thomas and Teresa were relishing themselves with the home made chocolates that their aunt had brought them from Ooty.

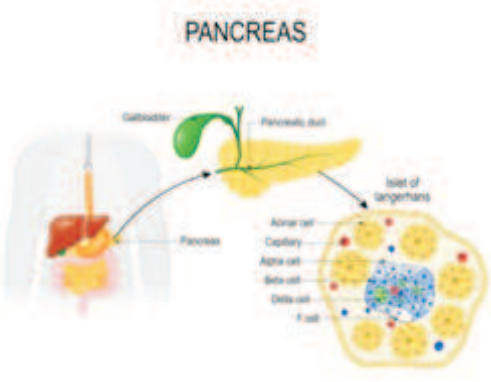
Teresa : Thomas these chocolates are so delicious!!!!

Thomas: Yes Teresa, but we shouldn't eat lots of them or else we'll end up having cavities and diabetes.

Teresa : Diabetes is very common among people these days isn't it? During earlier times, people with diabetes didn't live for long. They only used to follow strict diets that brought them extra years but didn't help them to live longer.

Thomas: Yes Teresa! Thanks to the discovery of Insulin because of which many human lives are saved today!

Teresa : What is the role of pancreas and insulin in digestion?



Thomas: Pancreas has an important structure called Islets of Langerhans. The beta cells of Islets of Langerhans produce insulin that reduces the sugar level in the blood. If insulin is secreted in low quantities cells will not be able to take up glucose from the blood to provide energy and will accumulate in the blood which may lead to various complications like hyperglycemia and diabetes.

Teresa: Diabetes are of two types isn't it?

Thomas: No Teresa, there are three types of diabetes namely Type 1, Type 2 and Gestational diabetes. Type 1 diabetes is an autoimmune condition. This means your immune system mistakenly attacks and destroys beta cells in your pancreas that produce insulin. The damage is permanent.

Teresa : But what causes them to attack the cells? Is it because of the food we eat?

Thomas: Our lifestyle is not a reason. The main factors for Type 1 diabetes are genetic and environmental reasons.

Teresa : What about Type 2 diabetes?

Thomas: Type 2 starts as insulin resistance. This means your body can't use insulin efficiently. That stimulates your pancreas to produce more insulin until it can no longer keep up with demand. Insulin production decreases, which leads to high blood sugar.

Sponsored By Department of Biotechnology, Ministry of Science & Technology, Government of India, New Delhi.

Teresa: So this means that improper diet, consuming food with more sugary compounds, lack of exercise and being overweight may lead to Type 2 diabetes. What about gestational diabetes? I am sure that it is related with preganancy.

Thomas: Yes Teresa, it is due to insulin-blocking hormones produced during pregnancy. This type of diabetes only occurs during pregnancy.

Teresa : What are the symptoms of diabetes?

Thomas: Excessive thirst and hunger, frequent urination, drowsiness or fatigue, dry itchy skin, blurry vision and slow-healing wounds are some of the symptoms of diabetes.

Teresa : Are insulin injections given to cure diabetes?

Thomas: No Teresa, Insulin injections such as Humalog, Novolog, Humulin etc. are given to bring down the glucose levels in the blood. Though it is not a cure for diabetes, it is literally a life saver!

Teresa: Thomas I heard that initially insulin was developed from dogs, pigs and cattles. Is it true?

Thomas: Yes Teresa, after lots of research, insulin derived from cattle was injected for the first time to a 14 year old boy, Leonard Thompson in 1922. Within 24 hours of injection his high blood glucose levels came down to normal.

Teresa : So when was human insulin developed?

Thomas: The first genetically engineered, synthetic "human" insulin was produced in 1978 using E. coli bacteria to produce the insulin. The first commercially available biosynthetic human insulin was sold under the brand name Humulin.

Teresa : Well, that was indeed very interesting. I really think we should eat chocolates in limited amounts to save ourselves from diabetes!

Thomas and Teresa say
"Insulin was accidentally discovered by the German physicians Joseph von Mering and Oscar Minkowski in 1889"

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UNKNOWN SIDE OF TOUCHPAD

Did you ever wonder how a touchpad works? Why doesn't it work when we try using pencil on it? Why it works improperly with gloved hands? Will it work if you use your tongue? Here is how a touch pad works. Come on! Let's dive into the TouchPad's world...

What is a touchpad?

It's a device that translates the motion of fingers on a surface into relative position of the cursor on the screen. A touch pad is a device for pointing on a computer display screen. It is an alternative to the mouse. Originally incorporated in laptop computers, touch pads are also being made for use with desktop computers. A touch pad works by sensing the user's finger movement and downward pressure.

History

The first touch pad was invented by George E. Gerpheide in 1988. Apple Computer was the first to license and use the touch pad in its Powerbook laptops in 1994. The touch pad has since become the leading cursor controlling device in laptops. Many laptops use a trackball. IBM ThinkPad laptops use a "pointing stick" that is set into the keyboard.

Working

The two most commonly used methods in making of touchpad are CONDUCTIVE sensing and CAPACITIVE sensing.

Conductive sensing

In conductive sensing there are two layers of grids used. One layer has horizontal set of wires and the other layer has a vertical set of wires. There is a low conductivity material between the wire intersections so that electricity does not flow between the wires. When the touchpad is pressed at a point, the material gets thinner between the wires, allowing the flow of electricity. Then the coordinates of point of contact is determined.

When this sensing method is used then any touchpad friendly object can be used to work on it, including pencil, finger or any object.

Capacitive sensing

This is the technology which is most commonly used nowadays.

Capacitive sensors detect anything which is conductive or has dielectric properties. Our body has the conductive properties, hence it works. This is not the case when you use a pencil. The capacitive sensitive touchpad has two parts; ground and sensor. When the finger is brought close to the touch pad, then capacitance of the system increases. From the position of capacitors which are charging and discharging at any point of time, the coordinates of point of touch is determined.

Device driver

There is a transducer connecting all elements on horizontal grid and another transducer for all elements on vertical grid. When the point on the grid array is pressed, the flow of current is detected by these transducers. Then the values are interpreted to the device driver.

This device driver in the operating system will translate all the events and coordinates into actions. It is totally up to the driver as to what actions are to be performed for each event.

For example: Contact with the touch pad for less than a second and again contact within a second leads to the event called the DOUBLE-CLICK.
Touching the pad at one coordinate and moving it to another coordinate is considered to be mouse movement. Again, it is up to the driver as to how far the cursor moves and in what direction.

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Scientist of the month

Vikram Sarabhai

Vikram Ambalal Sarabhai (12 August 1919 – 30 December 1971) was an Indian physicist and astronomer who initiated space research and helped develop nuclear power in India. He was instrumental in the setting up of the Indian Space Research Organization (ISRO), when he successfully convinced the Indian government of the importance of a space programme for a developing nation after the launch of the Russian Sputnik. He is internationally regarded as the Father of the Indian Space Program.

Early life

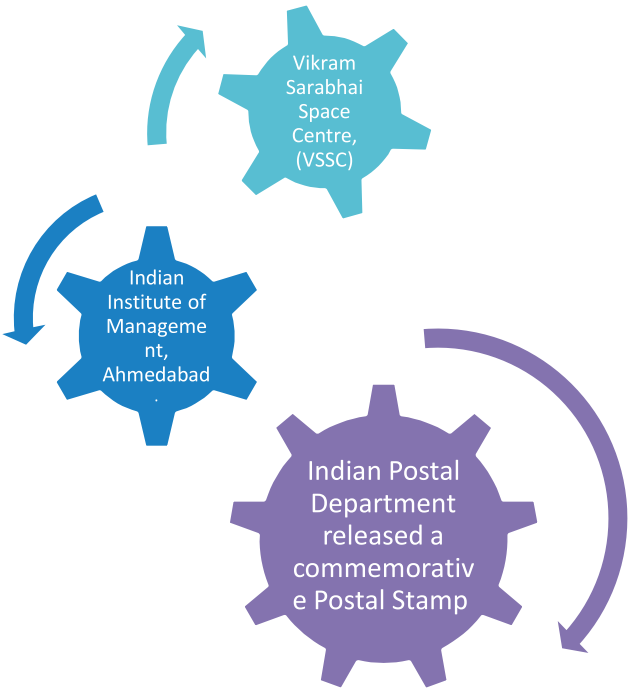
- Son of Ambalal Sarabhai, he came from the famous Sarabhai family

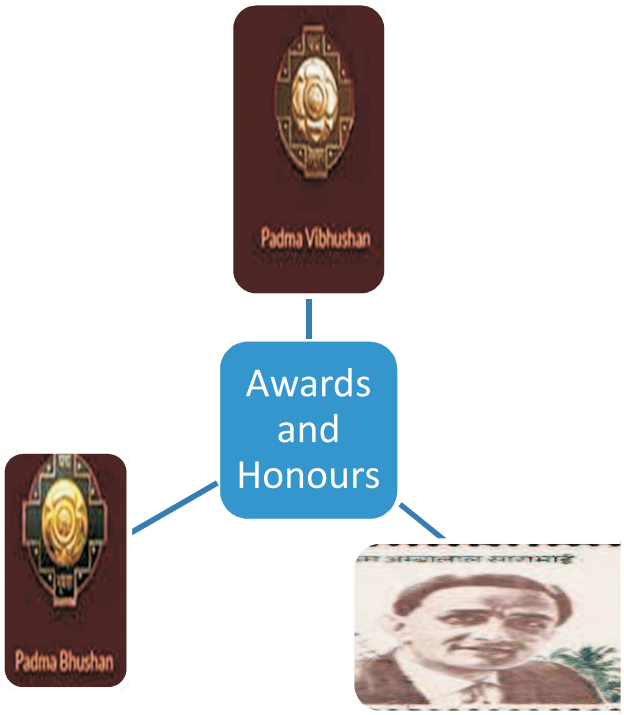
- He attended Gujarat College, Ahmedabad, but later moved to the University of Cambridge, England

- he returned to Cambridge to pursue PhD and wrote a thesis, “Cosmic Ray Investigations in Tropical Latitudes,” in 1947

He was awarded the Padma Bhushan in 1966 and the Padma Vubhushan after his death in 1972. While everyone knows of his primary role in the establishment of ISRO, perhaps many of us do not know that he was also the force behind the establishment of many other Indian institutes of repute, most notably the Indian Institute of Management, Ahmedabad (IIM-A) and the Nehru Foundation for Development.

Legacy





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Single Cell Protein - Spirulina

Proteins from single cell organisms, such as yeast, bacteria, fungi, and algae that are typically cultivated on agricultural wastes are referred to as SCPs. These are made with the purpose of replacing diets high in protein for both humans and animals.

Even though the concept of SCP is relatively new, microorganisms have long been used to produce food and enhance animal feed. Microorganisms have the capacity to improve low protein content, and the Germans took use of this phenomena during the First World War. The first commercial SCP, Pruteen, was primarily utilised as an additive to animal feed. The majority of underdeveloped nations have malnutrition and a lack of proteins, which can result in serious consequences.

SCP significantly contributes to the rise of protein deficit. For these people, SCP is an useful source of proteins because it can take the place of expensive traditional sources like soy meal and fish meal. They boost the nutritional content of animals and are frequently used to fatten calves, chickens, pigs, and fish for breeding.

Commercially available SCPs :

Spirulina :

It is a well-known SCP that contains 60–72% of proteins and is a good source of vitamins, minerals, crude fibre, and other nutrients.

It is frequently added to children's diets as a supplement. It is included in both baby foods and the diets of athletes. In the event of diabetes, it is also advised to maintain healthy eyes, contain antioxidants and act as an anti-aging agent.

Another SCP alga that is frequently utilised is chlorella. In addition to minerals, fibre, and vitamins, it also has about 45% protein, 20% fat, and CHO. In addition, it is frequently used as a medication.

Fusarium: - Fungi have been used since ancient times either as a source of food or for its medicinal values.

Quorn is the commercially available protein which is marketed in several supermarkets across Europe and North America as high protein, low fat and cholesterol free product.

It contains traces of vitamin B, dietary fibre and is used to control body mass and lower the risk of heart diseases.

Advantages of SCP:

SCP is excellent source of protein containing about 43-85 per cent.

It contains very low fat content and hence can be used widely.

It is a rich source of dietary fibre, vitamins and minerals.

It can be genetically modified to contain desirable amino acids.

It can be used as an animal feed supplement to increase weight and nutritive value.

It is also used in technical fields like paper processing, leather processing and as foam stabiliser.

It can be used in a broad spectrum of carbon source including waste products which helps in removal of pollutants.

Land requirement is less and the process of production is economically viable as it do not require sophisticated machinery.

Spirulina's evolution :

Our atmosphere's CO2 content was about 100 times higher when life first evolved on Earth than it is now. Microalgae played a key role in transforming this hostile planet into the beauty and richness that constitutes modern life. Life originated in a greenhouse environment.

The prokaryotes were the first living bacteria and they fed on chemical nutrients, though some of them learned to harness solar energy to produce their own food.

Known as cyanobacteria, the first photosynthesising prokaryotes harnessed light energy to split the plentiful CO2 and H2O molecules into C food components, releasing free O2. These single-cell filaments are visible in fossils from 3.6 million years ago. Unmistakably, the form is similar to spirulina.

History of spirulina :

Blue-green algae known as spirulina, or Arthrospira platensis, is edible but does not fix nitrogen. French physiologist Dangeard presented a report in 1940 about a substance called Dihe' that the Kenambu people near Lake Chad consumed.

Dihe' is made of sun-dried blue green algae that has been collected from the pond edges all around Lake Chad and hardened into cakes. Dangeard also learned that the same algae inhabited a number of lakes in the Rift Valley of East Africa and served as the primary food source for the flamingos that inhabited the area around those lakes.

Then discovered strange blue-green cakes in Fort Lamy's local markets in Chad. The algal mats were blown to the seashore by desert winds. The moist algae was collected by Kenambu locals in day pots and drains . Women cut the dried algae cakes into tiny squares so they can be sold at the neighbourhood market. Dihe is broken up and combined with a tomato and pepper sauce before being poured over millet, beans, fish, or pork.

The Kenambu consume it in 70% of their daily meals. Because they believe the colour of dihe' cakes will shield their unborn child from sorcerers' eyes, pregnant women consume dihe' cakes while they are still pregnant. For the treatment of some disorders, spirulina is also used as a poultice that is administered externally.

Hubbert Durand Chastel, a corporate director in Mexico, realised it was the same algae clogging the soda extraction plant on Lake Texicoco when he heard about spirulina around the same time.

Although Spirulina was not then eaten as a food in Mexico, an historical literature search revealed it was harvested dried and sold for human consumption 400years earlier, at the time of the Spanish conquest. Spanish chronicles described fishermen with fine nets collecting these coloured algae from the lagoons.

Cultivation of spirulina :

The hope of spirulina:

An environmentally friendly green food machine is a spirulina farm. These algae may double their biomass every 2 to 5 days when grown in small ponds.

This productivity breakthrough produces 400 times more beef, 40 times more maize, and almost 20 times more protein per acre than soy beans. Ponds constructed on already barren terrain and filled with brackish or alkaline water are ideal habitats for spirulina. By cultivating the growing deserts rather of removing the rapidly diminishing rainforests, it can increase the supply of food in this way.

Since the beginning of time, it has never been possible to raise food production and wilderness productivity at the same time. Man has never before had the option to choose.

For all of us, both now and in the twenty-first century, the rediscovery of this extinct species as a human diet has significant ramifications. It serves as an illustration of the plethora of amazing and surprising answers to fundamental global issues that are now starting to coexist on this globe.

A nutrient rich super food for super health :

Convenience foods that have been too processed and are depleted dominate our modern diet. Many people take additional vitamins and minerals as supplements. Science is now focusing on phytonutrients rather than just vitamins. Spirulina is referred to as a "super food" due to its nutritious profile.

Super Green Concentrate Food

Early studies showed that traditional people may safely eat spirulina. Spirulina was dubbed "food of the future" when researchers found that it could produce 20 times more protein per acre than soy beans while growing so quickly, With a protein content that is 65% higher than any other natural food, spirulina is the best source of vegetable protein.

Consuming 3 to 10 grammes of spirulina daily provides impressive amounts of beta carotene, vitamin B12 and B complex, iron, crucial trace elements, and gamma linolenic acid. In addition to vitamins and minerals, foods high in phytonutrients and functional nutrients have been shown to improve health.

For the undernourished people in the developing world, spirulina brings quick recovery from malnutrition. In western

overfed food culture loaded with unhealthy and depleted foods, spirulina can re nourish our bodies and renew our health. Food and drug administration confirmed in 1981 that spirulina can be legally marketed as a food supplement.

Benefits of spirulina :

Human health benefit of spirulina :

Controlling weight naturally: One hour before meals or snack breaks, take a heaping spoonful of powder (approximately 5 grammes) or at least 6 tablets. It's ideal to lose weight gradually yet steadily. Dieters frequently succeed in stabilising their body weight at a lower, more optimal level. Spirulina can aid in our ability to recall the benefits of a natural diet. It assists in de-cluttering and gives you the stamina to convert from a heavy, unhealthy diet to a lighter, more potent one rich in nutrients.

Lowering cholesterol level:

Spirulina is a helpful food for cholesterol reduction. Only 4 grams of spirulina day (8 tablets) significantly reduce cholesterol levels.

Reducing pre-menstrual syndrome :

Many clinics recommends foods and supplements rich in B-complex, magnesium, zinc, beta carotene, GLA and other nutrients spirulina is helpful in a PMS reducing pain and several PMS supplements contain spirulina.

Reducing the risk of cancer :

Compared to other plants, spirulina has a beta carotene concentration that is nearly ten times higher. Only 3 grammes of the safe form of natural beta carotene provide the RDA for vitamin A. Additionally, its complete carotenoid complex provides antioxidant protection at many locations throughout the body.

Colonic irrigation :

Spirulina is referred to as a metabolic activator because it works at the cellular level to encourage activity to burn off mucus-forming chemicals in the body tissues. Brazilians complain of constipation and take spirulina for its cleaning and normalising effects because they consume too much meat and not enough veggies and fibre.

Athletes and bodybuilders :

Concentrated superfoods have grown in popularity, and athletes require extra nutrients. Athletes claim that spirulina supplements boost stamina and provide energy before running or competing.

Marathon runners, backpackers, cyclists, and climbers who carry all of their food take pills for more energy and stamina per weight than regular foods, which boosts their endurance. This high-intensity meal is ideal for high-intensity exercise.

Prostaglandins are master hormones that control every cell in the body, including the heart, skin, circulation, and musculature. Spirulina contains GLA, which stimulates prostaglandins. Before the 1996 Olympic Games, the Cuban Sports Ministry received 1,600 bottles of spirulina so that competitors may step up their training.

Anti aging strategy:

With the highest level of the protective anti-oxidant beta carotene. It's good for eyes and vision. It builds healthy lactobacillus aiding in assimilation and elimination. Older people desire to eat less meat, so it's important to choose iron rich vegetable sources like spirulina. Vitamin B 12 absorption decreases with age, so B 12 rich spirulina is a sound choice. It contains rare EFA GLA, essential nutrients for healthy skin gram for gram it has more calcium and magnesium than other foods. Calcium and magnesium supplements are recommended for mature women who may have calcium from their bone mass and suffer from osteoporosis.

Potent antiviral activity:

In April 1996, scientists from the Laboratory of Viral Pathogenesis, Dana- Farber Cancer Institute, Harvard Medical School and Earthrise Farms announced on – going research, “Water extract Spirulina plantensis inhibits HIV-1 replication in human derived T- cells lines and in human peripheral blood mononuclear cells. A concentration of 5 to 10microgram/ ml was found to reduce viral production.

Improves immune system :

Spirulina is a potent immune system booster. It enhances immune system performance in tests including mice, hamsters, chickens, turkeys, cats, and fish. Researchers have discovered that it not only boosts the immune systems but also improves the body's capacity to produce new blood cells.

Bone marrow, stem cells, macrophages, T-cells, and natural killer cells—all significant components of the immune system—show heightened activity. The thymus and spleen glands operate better. Additionally, researchers have found that spirulina increases the quantity of activated macrophages, which are more efficient at eradicating pathogens.

Effects against hypertension and diabetes :

Spirulina is effective in preventing diabetes. While the water insoluble fraction lowered glucose levels after glucose loading, a water soluble fraction was found to be efficient in decreasing serum glucose levels during fasting. Blood pressure may also drop as a result. In a recent rat study, it was discovered to lower high blood pressure.

Benefits of malnourished children:

As little as 10 grammes per day, especially for newborns, can hasten recovery from malnutrition. Large-scale research involving preschoolers in India revealed the carotenes in spirulina helped kids recover from a lack of vitamin A.

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பச்சை இலைக் காய்கறிகள்

பச்சை இலைக் காய்கறிகள் வளர்ச்சி மற்றும் நல்ல ஆரோக்கியத்திற்கு இன்றியமையாதது, ஏனெனில் அவை அனைத்து முக்கிய ஊட்டச்சத்துக்களையும் கொண்டிருக்கின்றன. இந்தியாவில், பரந்த அளவிலான கீரைகள் நுகரப்படுகின்றன. இலை காய்கறிகளில் குறிப்பாக கனிம ஊட்டச்சத்து மற்றும் இரும்புச்சத்து நிறைந்துள்ளது. இரும்புச்சத்து குறைபாடு இரத்த சோகைக்கு வழிவகுக்கிறது. இது கர்ப்பிணி மற்றும் பாலூட்டும் பெண்கள் மற்றும் குழந்தைகளிடையே பொதுவான உடல்நலப் பிரச்சினையாகும். தினசரி உணவில் கீரைகளைச் சேர்த்துக் கொள்வது இரத்த சோகையைத் தடுக்கவும், நல்ல ஆரோக்கியத்தை மேம்படுத்தவும் உதவும். பச்சை இலைக் காய்கறிகள் கால்சியம், பீட்டா கரோட்டின் மற்றும் வைட்டமின் சி ஆகியவற்றின் வளமான மூலமாகும். இந்தியாவில், வைட்டமின் ஏ குறைபாட்டால் ஒவ்வொரு ஆண்டும் ஐந்து வயதுக்குட்பட்ட 30,000 குழந்தைகள் பார்வையற்றவர்களாகிறார்கள்.

கீரையில் உள்ள கரோட்டின் உடலில் வைட்டமின் ஏ ஆக மாற்றப்பட்டு குருட்டுத்தன்மைய தடுக்கிறது. கீரைகளில் வைட்டமின் சி உள்ளடக்கத்தை பாதுகாக்க, நீண்ட நேரம் சமைப்பதைத் தவிர்க்க வேண்டும், ஏனெனில் ஈறுகளை நல்ல நிலையில் வைத்திருக்கும். இந்த சத்து அதிக நேரம் சமைக்கும் போது குறைகிறது. கீரைகளில் சில பி-காம்ப்ளக்ஸ் வைட்டமின்களும் உள்ளன.

கீரைகள் குழந்தைகளுக்கு வயிற்றுப்போக்கு ஏற்படுத்தும் என்று பொதுவாக நம்பப்படுகிறது. எனவே பெரும்பாலான தாய்மார்கள் தங்கள் குழந்தைகளுக்கு இந்த சத்தான உணவைக் கொடுப்பதைத் தவிர்க்கிறார்கள். பல பாக்டீரியாக்கள், கிருமிகள் மற்றும் பூச்சிகள் கீரைகளை மாசுபடுத்துகின்றன. மேலும் அவை சரியாகக் கழுவப்படாவிட்டால், அவற்றை உட்கொள்ளும் போது வயிற்றுப்போக்கு ஏற்படலாம். அத்தகைய அசுத்தங்களை ஒழிக்கவும், வயிற்றுப்போக்கைத் தடுக்கவும் அனைத்து கீரைகளையும் ஓடும் நீரின் கீழ் நன்கு கழுவ வேண்டும். குழந்தைகளுக்கு கீரைகளை சமைத்து, பிசைந்து எடுத்து நார்ச்சத்துள்ள பகுதியை நீக்கிய பின்னரே வழங்க வேண்டும. கீரைகளின் ஊட்டச்சத்து மதிப்பைத் தக்கவைக்க, அதிகப்படியான அல்லது அதிகமாகச் சமைப்பதைத் தவிர்க்க வேண்டும். சமைக்கும் போது கீரையிலிருந்து கிடைக்கும் தண்ணீரையும் தூக்கி ஏறியக்கூடாது. கீரைகள் சமைக்கப்படும் பாத்திரம் ஒரு மூடியால் மூடப்பட்டிருப்பதை எப்போதும் உறுதிப்படுத்தவும். கரோட்டின் இழக்க நேரிடும் என்பதால் இலைகளை வெயிலில் காய வைக்க வேண்டாம். கீரையை பொரிப்பதை தவிர்க்கவும்.

கீரைகளின் ஊட்டச்சத்து மதிப்பை அதன் விலையைக் கொண்டு மதிப்பிடக்கூடாது, பெரும்பாலான மக்கள் அதைத் தவறாகச் செய்து, அவற்றைத் தரம் தாழ்ந்த உணவுப் பொருட்கள் என்று நிராகரிக்கின்றனர். ஏனெனில் கீரைகள் விலை குறைவு என்றாலும், மிகவும் சத்தானவை மற்றும் அனைவருக்கும் தேவைப்படும். பச்சை இலைக் காய்கறிகள் சாகுபடியை ஊக்குவிக்க வேண்டும். இதனால் அவை ஆண்டு முழுவதும் கிடைக்கும். சமையலறை தோட்டங்கள், மாடி தோட்டங்கள், பள்ளித் தோட்டங்கள் போன்றவை பச்சை இலைக் காய்கறிகளை வளர்க்க ஏற்றவை. கீரைகள் எளிதில் வளரக் கூடியவை அவைகளை வீட்டில் வளர்ப்பதன் மூலம் குழந்தைகளுக்கும் அவற்றின் முக்கியதுவத்தை எடுத்துரைக்கலாம்.

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NEET Chemistry

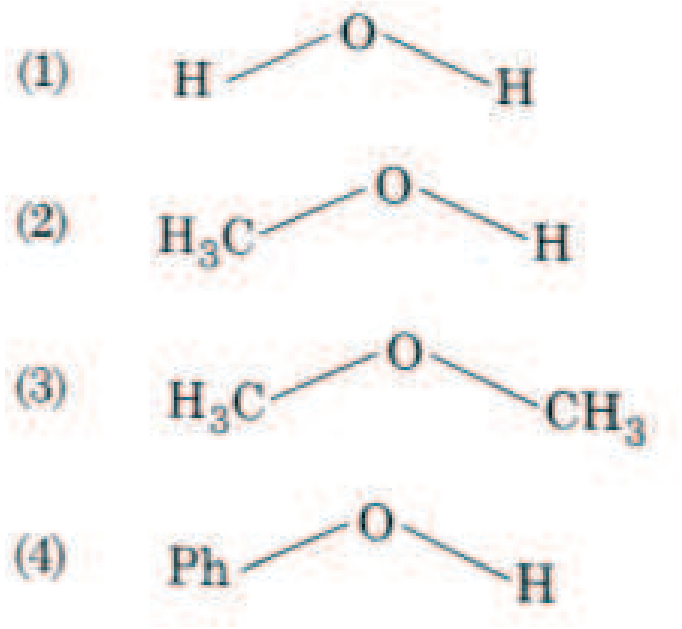
In the structure of ClF_3, the number of lone pairs of electrons on central atom Cl is

1) Four
2) Two
3) One
4) Three

Ans: 2

Explanation: Out of seven valence electrons, three are involved in bonding. Therefore two lone pairs of electrons are present.

The compound that is most difficult to protonate is



Ans: 4

Explanation: The lone pair of oxygen is involved in resonance with phenyl ring. Therefore, it is difficult to protonate.

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NEET Biology

During cell growth, DNA synthesis takes place in

(A) S phase
(B) G_1 phase
(C) M phase
(D) G_2 phase

Solution: (A)

Name the blood cells, whose reduction in number can cause clotting disorder, leading to excessive loss of blood from the body.

(A) Erythrocytes
(B) Leucocytes
(C) Neutrophils
(D) Thrombocytes

Solution: (D)

Biochemical Oxygen Demand (BOD) may not be a good index for pollution for water bodies receiving effluents from

(A) Domestic sewage
(B) Dairy industry
(C) Petroleum industry
(D) Sugar industry

Solution: (C)

The balloon-shaped structures called tyloses

(A) Originate in the lumen of vessels
(B) Characterize the sapwood
(C) Are extensions of xylem parenchyma cells into vessels
(D) Are linked to the ascent of sap through xylem vessels

Solution: (C)

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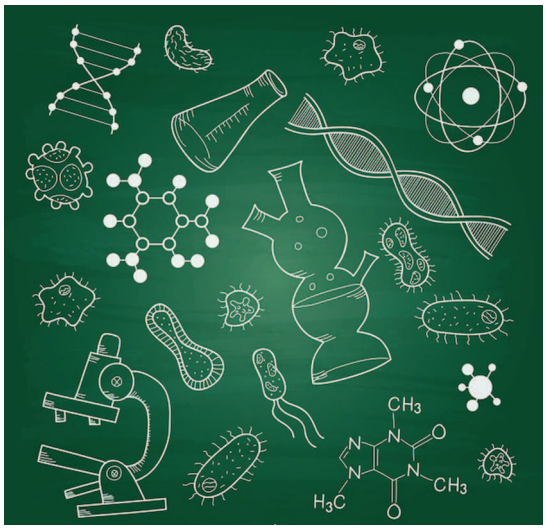
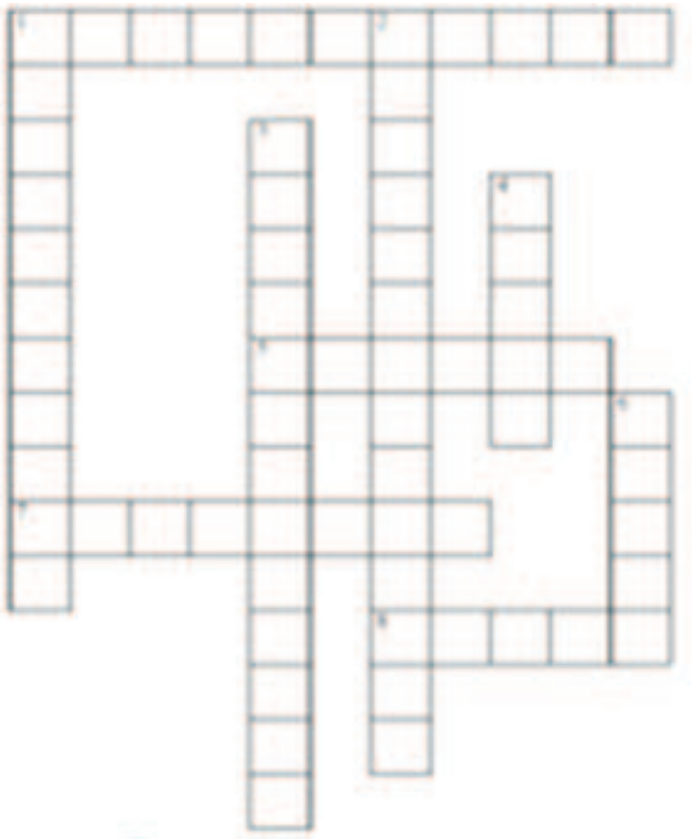


CONUNDRUM WITH PHINEAS AND FERB



Across

1. Part of plant cell gathers energy
5. Waste product of photosynthesis
7. Photosynthesis uses this form of energy to drive the process
8. Compound produced by photosynthesis

Down

1. Part of plant cell that contains chlorophyll
2. Name the process in which plant produces its own food
3. One of the two compounds converted during photosynthesis two words
4. Chlorophyll gives plant life this colour
6. Other compound converted during photosynthesis one word

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PICTURE CONNECT

10 AMAZING FACTS ON SCIENCE

- Mars is red because of iron oxide
- Every hydrogen atom in your body is likely 13.5 billion years old because they were created at the birth of the universe
- The only letter which is not found in periodic table is the letter J
- Banana contains potassium so if potassium decays then the banana will become slightly radioactive
- The atmosphere of venus is made up of thick white and yellowish colour of sulphuric acid
- Gallium is a metal which melts in the palm of our hand
- Diamonds are the hardest natural substance on earth
- Air becomes liquid at -190^0 celsius
- Around 1% of sun's mass is oxygen
- Earthworms have 5 hearts

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Sponsored By Department of Biotechnology, Ministry of Science & Technology, Government of India, New Delhi.

CHRONICLE OF SMC

Vision

To make young women agents of an egalitarian society through liberative education.

Mission

To empower women through regular and non-formal programmes to make them economically independent and socially aware so that they make better homes and contribute to family and social progress.

2012

- New Class rooms for MHRM
- Conference Hall opened by Sr.Eustacia Mary, General Councillor, Servite Generalate (20.1.2012)
- Release of Research Journal "Marian Quest"
- Graduation Day addressed by Dr. K. Muthuchelian, Vice Chancellor, Periyar University, Salem
- Release of IQAC Newsletter
- Recognised as DST-FIST funded College by DST, New Delhi with a grant of Rs. 46 lakhs
- Release of French Magazine 'DES PERLES FRANCOPHONES'
- Inauguration of UGC sponsored Foundation Course 'Human Rights Education' by the Department of History and Tourism.
- Renovation of Library, Student Centre, Departments of English, Botany, Zoology, Controller's Office and Arockiya Block (SSC)
- Foundation laid for Women's Study Centre
- Blessing of Xavier Indoor Stadium
- NAAC- Peer Team Visit - Third cycle (December 2012)
- Release of Pearl Review - A Bi-annual Research Journal by Pearl Research

Let's pick up where we left off in the next month issue...