ARBiT
it happens here...

Bank Account Bonus Month

When we consider opening up a new bank account we generally spend time trying to find on that doesn't charge too much fees; has the features we require and a physical branch located somewhere nearby. Bank Account Bonus Month reminds us to take a moment and think about opening a bank account that will pay us to do so. Throughout the world banks offer incentives to new customers in the form of 'Bank Account Bonuses' to entice people into opening a new account.

राष्ट्रदूत
WEDNESDAY
27 July 2022
A-B

#PARENTING

Baby Behaviour

How speaking 'parentese' helps your baby learn to talk is indeed a must have tip for the parents of new age.

Name: Parentese.
Age: Popular since the mid-80s.
Sounds like: A bit like you're being patronised.

I don't like being patronised. Oh yes, you do! Yes you do! Yes you do, my little sweetheart!

What on earth are you doing? I'm talking parentese to you. And by the look of it, it's working. Yes it is! Yes it is!

Ok, let's track back a little. What is parentese? I'm glad you asked. It's a method of communicating with babies that utilises vowel hyperarticulation, pitch modification, slow speech rate and simplified wording.

One of the most smile-inducing milestones in a baby's life is when they manage their first word. But that magical moment could happen sooner, depending on the way parents or carers speak to the child.

Scientists have long suggested that babies prefer what's called parentese - when

mothers and fathers modulate their voice, including making it higher in pitch.

What is Parentese?

It's tempting to coo or babble at your newborn or even make up words like tootsies for toes and abandon all grammar.

But numerous studies have shown true baby talk actually involves using proper grammatical structures, speaking about an octave higher than normal, saying things more slowly, exaggerating the rise and fall of your voice and crucially leaving pauses to give baby a chance to respond.

All of this serves to make you sound happy and encourages your baby to engage in communication which is an important step in their cognitive and social development.

Imagine you and your baby are getting ready to go outside. While you put on their coat and shoes, you speak to them and maintain eye contact. "How is my sweet baby today?" you say. "Are you getting dressed? Yes you are, yes you are! Do you see your shoes? Where are your shoes? There they are! Who looks so handsome? You do! You look sooo handsome!" Your baby giggles and waves in excitement when your tone changes. You mirror their smile and respond similarly when they babble back to you. This communicative exchange may come naturally to you and your baby but it may be surprising to know you're actually practicing key elements of parentese speech.

Parentese is a type of speech in which a parent or caregiver mixes proper yet simple grammar and words with exaggerated sounds and tones to communicate with their baby. This type of speech is used in virtually all languages and is often characterized by repetition, elongated vowels, high pitch and slow tempo which are most effective in face-to-face interactions. A strategic use of inflection also encourages back-and-forth exchanges between parent and baby in order to familiarize the child with typical patterns of conversation. Parentese can be spoken to babies as early as six months.

Parentese & Baby Talk

Parentese and baby talk (also called babble) are both important factors in a baby's early language development, although they differ in construction. Baby talk is usually defined by silly sounds and wording (like 'goo googaga') that help a baby recognize different phonetic patterns and sounds. An infant may begin producing vowel sounds around two months as a result of their cooing and babbles. Baby talk is useful in developing an infant's understanding of early patterns of communication such as emotional tone and attention.

When babies are between four and seven months old they may begin to incorporate more sounds and pitches from an awareness of their babble with parents. This is where parentese can further aid in language development. With a familiarity of phonetic sounds and tone babies absorb more language skills through parentese's array of strategic tempos, pitches, inflections and sentence structures.

An easy way to think of baby talk is simplifying, while parentese is emphasizing. For example, baby talk may sound like, "Does teddy want wa-wa?" Parentese, on the other hand, might be: "Does the teddy bear want water?"

Benefits of Parentese

Parentese is highly effective because the high pitch and slower tempo serve as a 'social hook' for a baby's brain and encourages their response.

Surprisingly, parentese has also been found to encourage motor planning in infants. Non-invasive brain scans on babies who had listened to their parents use parentese speech found that both the auditory centres of the brain and the areas for motor planning were activated. This suggests that babies practice the movements to produce speech long before they begin talking (as early as seven months).

Chilling with Chillies

A handy guide to help you handle the flame

Coming back to where we started, the Mathaniya Mirchi can also play more than one culinary note on your plate. Apart from the ever so perfect role of adding its heat, culinary expert Andrew Rea has used it and other dried chillies by rehydrating them in a cup of warm water and then processing them with their liquid in a blender. This results in a very hot sauce as you can imagine but its the next part of simmering it with garlic, tomatoes, vinegar and a bit of brown sugar that results in a very tangy hot sauce that will give Tabasco and store bought sriracha a run for its money.

Shubham Agarwal
BhukkadBaniya, Food Blogger and Freelance writer

As a person born and brought up in the desert state of India, chillies have been an essential part of my everyday diet. More than just culture, this spiciness of Rajasthani food has served a deeper, more coherent purpose of thinning the blood which reduces the chances of heat stroke by increasing the blood circulation in our bodies.

How did the ancient physician arrive at such an accurate yet perplexing discovery is beyond me but what really put the seal on this deal of 'Believe-it-or-not' is that the famous Mathaniya Mirchi, which has been unofficial flag bearer of quintessential Rajasthani flavours is not native to our state. Or even our country!

It was first brought to India by the Portuguese in the 15th century to the ports of Goa and slowly made its way North to the dried land of Rajasthan, where it took such a stronghold that for the last 400 years it has been loved like a Rann Banka - the desert's own warrior. A warrior who has played an integral part in forging the glorious history of Rajasthan by aiding the fierce warriors that have lived on this land.

But this is not only a reminiscence of that glorious past. It is also a small peek into my present and maybe, just maybe, a small effort to change the way how you treat chillies in your future.

See, chilli as a fruit, doesn't seem very 'fruity' to most at the first glance, and they'd be somewhat correct.

The heat being its dominating and defining flavour, is what would deter most from even acknowledging its 'fruit' status, but I'd beg to differ and give them another chance to prove their versatility.

#MIRCHI

With over 4,000 different varieties, chillies have not solely been used for their heat. Some of these varieties are sour and zingy; some are sharp and some are the bitter spawn of the Devil himself which might result in an instant regret.

Weird Spicy Fruit

Apart from just the varieties themselves, cuisines around the world have employed multiple culinary techniques to bring out much more than just the angry heat that these pods carry.

Spanish and Mexican people, who were the first to get acquainted with this spicy fruit, have long used it in creative and rather weird ways but the end result has been a dish that is a culinary work of art, if not at least very palatable.

Mild chillies like Pappadew, which are varieties originating from Capsicums are tossed in salad bowls to cut through the richness of cheese and/or other protein(s). It also serves as an excellent pickling chilli.

On the other hand of this spectrum, a slightly hotter chilli Poblano, has been used in its dried form to spice up Bitter Dark Chocolate which has been an iconic, traditional recipe of Mexican cuisine.

I know what you might be thinking; I am naming all these exotic chilli varieties which are a little hard to get hold of at your regular sabziwala or even the Supermarket and thus it might not serve any purpose whatsoever but that's the interesting bit.

One doesn't need Guajillo or Poblano or even the readily available brined Jalapenos to spice up their food.

All you need to employ is the same techniques that these cuisines use to unlock these exoctic myriad flavours.

Would you believe if I told you that some of you might have already been doing something similar for most of your lives?

Serving the Purpose

I am talking about the simple, rustic yet supremely satisfying 'Flame grilled Chilli' with a dash of lemon and tinge of salt.

If you've never heard of it, ask the elders in your house because I bet there's barely an elderly person who has not had a dinner which included this Two-Minute recipe.

All you have to do is to take a fresh green chilli, one that is not overly bitter and put it on an open flame. It will pop, sizzle and get a little charred but that is okay.

It's these charred dots that will add a smoky aroma to the otherwise zingy, sharp chilli.

Add the aforementioned two condiments to it and you will have a rustic side dish that will add a bit of tangy heat to your bite.

If by mistake or wilful negligence your chilli is black with charr, rather than being beautifully bespeckled, worry not. Wrap it completely in some foil paper and wait for a miracle you're about to taste.

In 3-5 minutes, the chilli will steam and sweat from its own moisture, essentially getting baked in the small sauna you just created.

All you have to do next is to remove all of the black charr with a paper napkin and you'll have a glistening steamed pepper underneath it which will be so sweet in taste that you could eat it by the spoonful.

Just remember to avoid the seeds as those puppies are a bit hard to turn around in their bitter flavour profile.

Talking about the bitterness, an easy way to tell a bitter chilli from one that is sharp and zingy is to just take a look.

Rule of thumb says - "Small guy-Heat and Sweat, Fat boy - A sweeter bet", so avoid grilling the tiny ones because they will have their revenge, that very day or next.

This rule of thumb finds its origins in the general classification of chillies and peppers as the ones belonging to the capsicum class generally tend to be sweeter and fatter.

The other end of this heat spectrum right opposite to the bitter heat one ideally should be the sweeter side of chilli but I happen to find that it is not so. That end belongs to the bland tasting chillies that are devoid of any flavour, including the fresh zing and peppery bite.

Such bland chillies can also serve a purpose which is quick, easy and boosts any savoury dish with a sweet, sour and umami flavour.

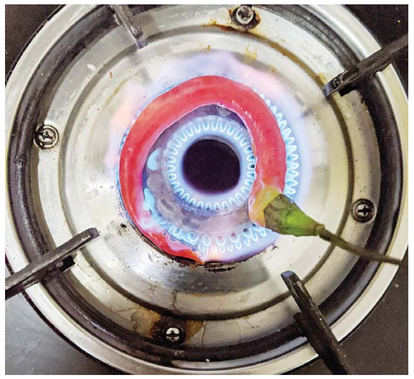
This can be achieved by simply pickling the chillies with a hot vinegar-salt-sugar brine which is spiced with your favourite spices like mace, cinnamon, star anise to name a few.

Coming back to where we started, the Mathaniya Mirchi can also play more than one culinary note on your plate. Apart from the ever so perfect role of adding its heat, culinary expert Andrew Rea has used it and other dried chillies by rehydrating them in a cup of warm water and then processing them with their liquid in a blender.

This results in a very hot sauce, as you can imagine but its the next part of simmering it with garlic, tomatoes, vinegar and a bit of brown sugar that results in a very tangy hot sauce that will give Tabasco and store bought sriracha a run for its money.

As I have always claimed, we live in a big world that has been made small by the exchange of information but with a bit of creative thinking, tinkering and getting to truly know what you have in your hands, we can make it a global backyard where we are not limited by availability of ingredients but only by the far reaches of our imagination and ingenuity.

writetoarbit@rashtradoot.com



Chilli as a fruit, doesn't seem very 'fruity' to most at the first glance, and they'd be somewhat correct as heat being its dominating flavour make many to even acknowledge it to its 'fruit' status, but I beg to differ here and give them another chance to prove their versatility.

> As I have always claimed, we live in a big world that has been made small by the exchange of information but with a bit of creative thinking, tinkering and getting to truly know what you have in your hands, we can make it a global backyard where we are not limited by availability of ingredients but only by the far reaches of our imagination and ingenuity.

#DEMOGRAPHICS

Fear of Robotics

There is a wide interest in understanding the labour market effects of robots -- how robots affect the employment and wages of workers, particularly in the manufacturing sector," says Osea Giuntella, assistant professor of economics at the University of Pittsburgh and an expert in labour economics and economic demography. "However, we still know very little about the effects on physical and mental health."

Using data from the OSHA Data Initiative, the team found injuries were reduced by 1.2 cases per 100 workers when a regional labour market experienced an increase in robot exposure.

Meanwhile the areas with more people working alongside robots had a significant increase in alcohol or drug related deaths 37.8 cases per 100,000 people as well as a slight increase in mental health issues and suicide rates.

"On one hand robots could take on some of the most strenuous, physically intensive and risky tasks reducing [human] workers' risk," Giuntella says. "On the other hand the competition with robots may increase the pressure on workers who may lose their jobs or be forced to retrain."

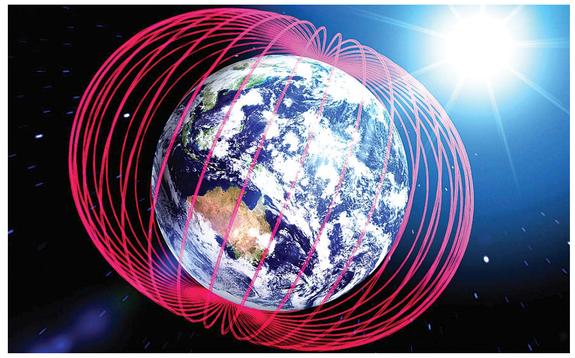
With the help of Luca Stella from Freie Universität Berlin, the team also investigated whether these trends were unique to the US. According to their analysis German workers saw a 5% decrease in injuries but no significant mental health changes when exposed to robotics.

"Robot exposure did not cause disruptive job losses in Germany; Germany has a much higher employment protection legislation," says Rania Gihleb, an assistant professor in the economics department at the University of Pittsburgh. "In contexts where workers were less protected, competition with robots was associated with a rise in mental health problems."

"There has been an intense debate on the effects of robotics and automation on labour market outcomes but we still know little about how these structural economic changes are reshaping the key life-course choices," says Giuntella.

#FORCE FIELD

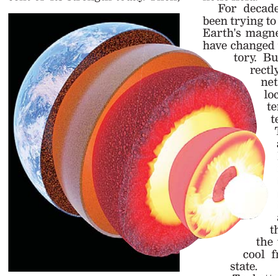
Earth's Magnetic Field



Ancient rocks hold clues to how Earth can sustain life avoiding a Mars-like fate.

Around 2800 kilometres below where you are standing right now, there is a large amount of molten iron swirling around and generating our planet's magnetic field. This magnetic field may be invisible but it is vital for life on Earth since it shields the planet from streams of radiation from the sun known as solar wind.

But around 565 million years ago our planet's magnetic field decreased to less than ten per cent of its strength today. Then,



almost mysteriously the field regained its strength just before the Cambrian explosion or the 'biological big bang' when various phylae and species of multicellular life emerged on earth.

A new paleo-magnetic research study published in Nature Communications says that this rejuvenation of the magnetic field happened within the span of a few tens of million years (which is rapid in a geological contact) and also coincided with the formation of Earth's solid inner core. This suggests that the core is likely a direct cause of the rejuvenation.

"The inner core is tremendously important. Right before the inner core started to grow, the magnetic field was at the point of collapse but as soon as the inner core started to grow the field was regenerated," said John Tarduno, corresponding author of the paper, in a press statement. Tarduno is the William R Kenan, Jr Professor of Geophysics in the Department of Earth and Environmental Sciences and dean of research for Arts, Sciences & Engineering at the University of Rochester.

Our planet's magnetic field is generated in its outer core which lies between the Earth's mantle and the solid inner core. The solid inner core is composed of an outermost inner core and innermost inner core. In the outer core swirling liquid iron generates electric currents due to a geo-dynamo process and in turn these electric currents induce the magnetic field.

For decades scientists have been trying to figure out how the Earth's magnetic field and core have changed throughout or history. But they cannot directly measure the magnetic field due to the location and extreme temperatures of materials in the core. Thankfully, minerals that rise to Earth's surface from the core contain tiny magnetic particles that lock in the direction and intensity of the magnetic field at the time the minerals cool from their molten state.

To better understand the age and growth of the inner core, Tarduno and his team used a carbon dioxide laser and a superconducting quantum interference device (SQUID) magnetometer to analyse particular mineral crystals from the rock anorthosite. These 'feldspar' minerals have minute magnetic needles within them that Tarduno calls 'perfect magnetic recorders'.

By studying the magnetism 'locked' in these ancient crystals, researchers were able to deduce two important events in the history of the Earth's inner core.

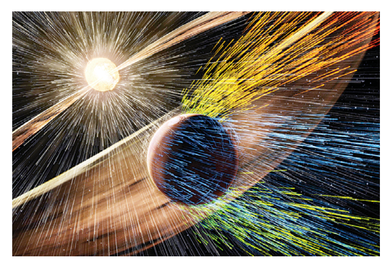
First, the formation of a solid inner core happened about 550 million years ago. Researchers attribute the rapid renewal of the magnetic field at the same time to this formation and deduce that the solid inner core recharged the molten outer core and restored the magnetic field's strength.

Second, the growing inner core's structure changed about 450 million years ago. This marked the boundary between the innermost and outermost inner core. The mantle that lies above the core also saw some changes around the same time due to plate tectonics on the surface.

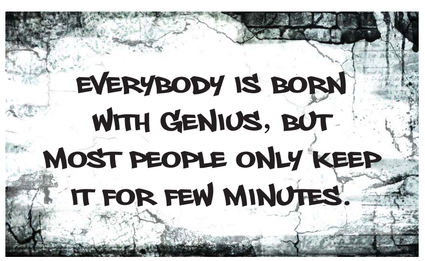
"Because we constrained the inner core's age more accurately, we could explore the fact that the present day inner core is actually composed of two parts. Plate tectonic movements on Earth's surface indirectly affected the inner core and the history of these movements is imprinted deep within Earth in the inner core's structure," added Tarduno in the press statement.

Researchers believe that Mars once had a magnetic field that later dissipated leaving the planet ocean-less and vulnerable to solar winds. While it is not easy to conclude that the Earth would have met the same fate without the magnetic field and our planet would have lost a lot more water if the field was not generated.

By understanding how these processes work scientist get insights into how other planets could also form magnetic shields and sustain the conditions needed to harbour life as we know it.



THE WALL



BABY BLUES

By Rick Kirkman & Jerry Scott

ZITS

By Jerry Scott & Jim Borgman