



## FOREWORD

MediTimes from the desk of Medical Services brings the latest trending healthcare news.

The **In focus** latest medical news comprises of articles on **Does Gum Disease Increase the Risk of Heart attack and Stroke?** and **Early Warning for Seizures Could be a game-changer for Epilepsy Patients**

The **COVID-19 infohub** focuses on knowing about the **COVID-19 RISK: Finding yourself in different situations**

The **greens for health** section, in this issue provides an insight about the health benefits of **Broccoli**.

Hope this January 2021 issue of Meditimes would be an informative reading

Happy Reading!!!

Best Regards,

Jr. Manjula S

Sen.or VP- Medical Services

## LATEST MEDICAL NEWS



Does Gum Disease Increase the Risk of Heart attack and Stroke?



Early Warning for Seizures Could be a game-changer for Epilepsy Patients

## COVID-19 INFOHUB



COVID-19 RISK: Finding yourself in different situations

## GREENS FOR HEALTH



Broccoli



## FUN CORNER



## DIMAG KI BATTI JALAO!



## Does Gum Disease Increase the Risk of Heart attack and Stroke?



Gum disease is a serious infection of the gums. It's caused by bacteria that gets accumulated on teeth and gums. Bones and teeth can be damaged as gum disease progresses. The study findings published in the journal *Periodontitis* provides an insight between the gum disease and heart disease.

This study has found that people who are suffering from gum disease are at increased risk of cardiovascular events such as heart attack and stroke.

In this study patients with the signs of inflammation associated with gum disease and inflammation in the arteries underwent Positron Emission tomography and Computed tomography. Around 4 years later when followup scans were carried out subjects developed major adverse cardiovascular events.

Author Dr. Dyke TE, says that if aged person or who have cardiovascular diseases should not ignore Gum disease because it can increase the risk of heart attack. The researchers found that at the beginning of the study individuals with signs of inflammation associated with active gum disease were more likely to have a cardiovascular event.

Inflammation in arteries would more likely develop in individuals with inflammation of their gums which can go on to cause cardiovascular disease.

- This study found out that increased risk of Major Cardiovascular Events such as heart attack and strokes in individuals with active gum disease.
- Subjects who had a past history of Gum disease but no longer inflamed gums are not at increased risk.
- Gum disease causes increased arterial inflammation, which is responsible for CV events.

Van Dyke TE, Kholy KE, Ishaq A, Takor FA, Mezzacane K, Abuhashem SM, Ali A, Syuan N, Hsue P, O'brien MT, Tanihiko A. Inflammation of the periodontium associates with risk of future cardiovascular events. *Journal of Periodontology*. 2021 Jan 29.





## Early Warning for Seizures Could be a game-changer for Epilepsy Patients

Epilepsy is a disorder characterized by recurring seizures. A seizure is a temporary disturbance in the Electrical activity of the brain. Seizure can occur at any time or any place and is risky when it strikes during situations such as driving.

A new study published in the journal of *Neural Engineering* aimed to develop a mathematical model that can predict seizure in epilepsy patients by identifying an accurate warning five minutes to one hour before they are likely to experience a seizure.



Team of researchers have worked with implantable devices, which monitors the brain's electrical signals in the same way that an electroencephalogram (EEG) uses external electrodes to measure signals. The new mathematical model can take this data and learn each patient's unique brain signals, looking out for precursors, or patterns of brain activity.

This model is able to precisely predict whether seizure can strike within 1 hour which helps the patient to be alert about not to drive car, or to take their medicine, or to go and sit down.

Every brain is very different in terms of the signals that indicate a "pre-ictal" state (State immediately before the actual seizure). This model is patient specific and it brings out the information that is important for each individual patient.

This study showed that it helps most of the patients with epilepsy experiencing fear and anxiety about their next strike of seizure while driving, walking in public or during their normal daily activities. Hence prevents seizure strikes in risky situations. This mathematical model helps to predict seizures that will give epilepsy patients an accurate warning five minutes to one hour before they are likely to experience a seizure.

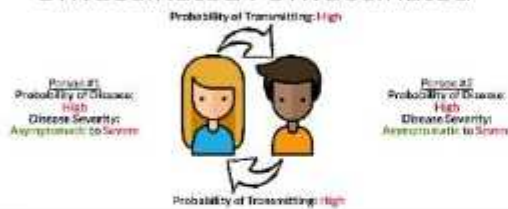
Yu PN, Liu C, Heck CN, Berger TW, Long D. A sparse multiscale nonlinear autoregressive model for seizure prediction. *Journal of Neural Engineering*. 2021 Jan 19.



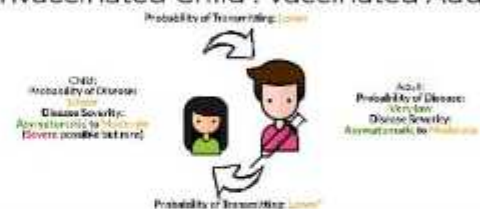
## COVID-19 : Infohub

# COVID-19 Risk: Finding yourself in different situations

### Unvaccinated : Unvaccinated



### Unvaccinated Child : Vaccinated Adult



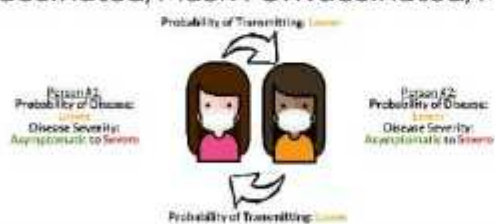
### Unvaccinated/Mask : Unvaccinated



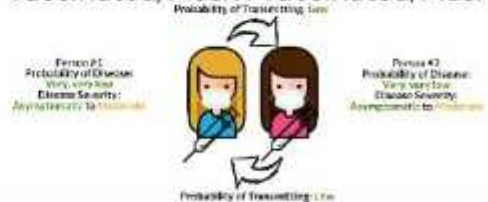
### Vaccinated : Vaccinated



### Unvaccinated/Mask : Unvaccinated/Mask



### Vaccinated/Mask : Vaccinated/Mask



### Unvaccinated : Vaccinated



In these situations, we're assuming—

- You're in close proximity for 15+ minutes (2+ minutes with Absorbant)
- You're in an enclosed area with recirculated air circulation
- Mask is high quality & correctly transmitted
- Wearing masks & still

\*Probability reduction has suggested evidence makes transmission from 50-90%

Dr. Dr. Karsten Lieber, MPH, PhD, Assistant Professor of Epidemiology & Author of 'You, Your Local Epidemologist'







## BROCCOLI

Broccoli is the green vegetable which belongs to the *Brassicaceae* family which has leafy green flower heads and branches sprouting from a thick edible stalk.

### HEALTH BENEFITS

- Anti-oxidant
- Aids in Improving Bone health
- Boosts Immune system
- Promotes digestion
- Prevents constipation
- Aids Weight loss

<https://www.medixtimes.com/seasonal-produce-entries/broccoli.html/broccoli>

Nutrition facts	
Serving Size: 1 broccoli, 1 cup chopped (1g)	
Amount per serving: 31	
Calories	
	% Daily Value
Total Fat 0g	0%
Saturated Fat 0g	1%
Trans Fat 0g	0%
Cholesterol 10mg	0%
Sodium 30 mg	1%
Total Carbohydrates 6g	2%
Dietary Fiber 2g	10%
Protein 3g	
Vitamin D 0mcg	0%
Calcium 43mg	3%
Iron 1 mg	4%





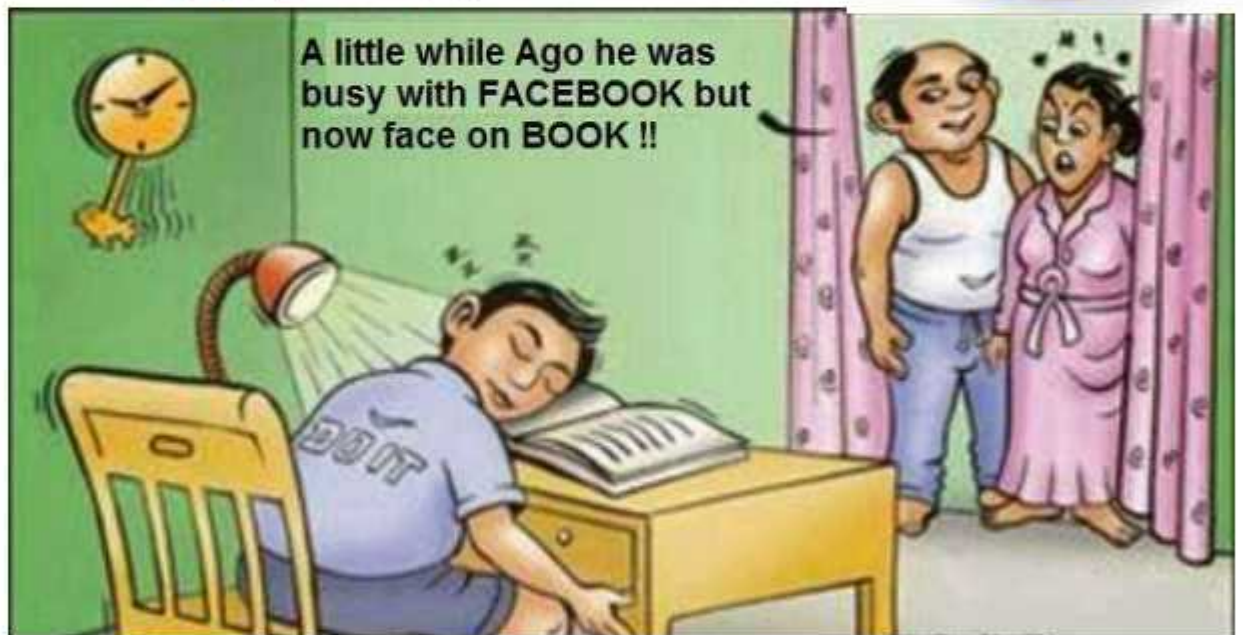
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## The Fun Corner







## DIMAG KI BATTI JALAO



1. What is the other name for Gum disease?
2. Broccoli belongs to the family of \_\_\_\_\_
3. She has a comfortable bed but She never sleeps. She will always run but will not walk, Though she has a mouth she never talks. Guess who is She?



Please send your quiz answers to [Jrmarjula@m.croabs.in](mailto:Jrmarjula@m.croabs.in) or [medicalservices@m.croabs.in](mailto:medicalservices@m.croabs.in) and winner will get a surprise gift