

Medi Times

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

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This issue focuses on Pneumonia, medicinal value of Green Tea and a Fun Corner with Dimag Ki Batti Jalao.

Happy Reading !!!



Germ on Smartphones tells about users' habits and lifestyles 2

Poor sleep' results in irregular heartbeat ... 3

Regular intake of sugary beverages results in prediabetes 5



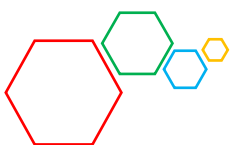
Pneumonia 7



Green Tea 10



Fun Corner 12





Germs on Smartphones tells about users' habits and lifestyles

By analyzing chemicals, molecules and germs on people's smartphones, researchers say they were able to get a good idea of users' habits and lifestyles. This included aspects such as diet, medications, hygiene and beauty products, general health, and places visited.



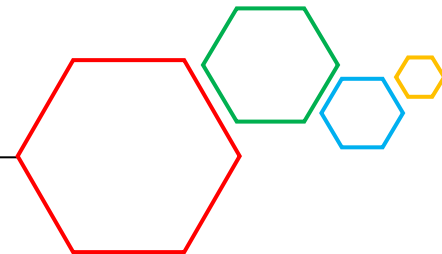
This approach could prove useful in a number of areas, including medical clinical trials, criminal profiling, airport screening, making

sure patients are taking medications, and environmental exposure studies, said study senior author Pieter Dorrestein.

"You can imagine a scenario where a crime scene investigator comes across a personal object -- like a phone, pen or key -- without fingerprints or DNA, or with prints or

DNA not found in the database. They would have nothing to go on to determine who that belongs to," said Dorrestein.

By analyzing chemicals, molecules and germs on people's smartphones, researchers say they were able to get a good idea of users' habits and lifestyles



He's a professor at the University of California, San Diego School of Medicine and School of Pharmacy and Pharmaceutical Sciences.

"So we thought -- what if we take advantage of left-behind skin chemistry to tell us what kind of lifestyle this person has?" Dorrestein said in a university news release.

Dorrestein and colleagues took swabs from four areas on the cellphones of 39 healthy adults.

"By analyzing the molecules they've left behind on their phones, we could tell if a person is likely female, uses high-end cosmetics, dyes her hair, drinks coffee, prefers beer over wine, likes spicy food, is being treated for depression, wears sunscreen and bug spray -- and therefore likely spends a lot of time outdoors -- all kinds of things," said study first author Amina

Bouslimani. She's an assistant project scientist in Dorrestein's lab.

"This is the kind of information that could help an investigator narrow down the search for an object's owner," Bouslimani added.

Dorrestein said the study had limitations. His team's molecular analysis offered a general profile of a person's lifestyle, but could not make a distinct match, like a fingerprint.

The study was published Nov. 14 in the journal *Proceedings of the National Academy of Sciences*.

The researchers are continuing their study with an additional 80 people and samples from other personal objects such as wallets and keys.

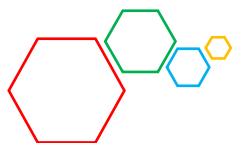
Source: Published by Robert Preidt. University of California, San Diego, news release, Nov. 14, 2016.

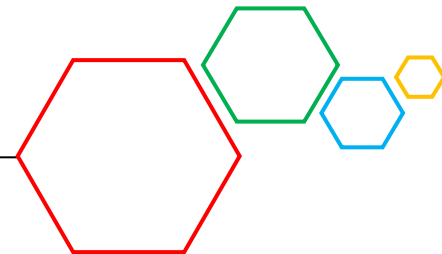
'Poor sleep' results in irregular heartbeat

Having disturbed sleep could increase your chances of having an irregular heartbeat, according to a study.

Preliminary research presented at a conference in the US suggests that sleep apnoea, insomnia and frequent waking are all risk factors.

Previous research has shown that a link exists between poor sleep and people who already have a particular type of irregular heartbeat known as atrial fibrillation. However, researchers at the University of California say it's been unclear





whether poor sleep can cause the condition.

Sleep apnoea

One important reason why people have poor sleep is called obstructive sleep apnoea. This condition means that people experience prolonged pauses in their breathing when they are asleep. It's already been established that sleep apnoea can cause strokes, heart failure and other heart related complications.

heartbeat than those who didn't wake up a lot.

People diagnosed with insomnia had a 29% higher risk of developing an irregular heartbeat than those without insomnia.

"The idea that these three studies gave us consistent results was exciting," says study author Matt Christensen from the University of Michigan.

REM sleep.

People are more likely to have obstructive sleep apnoea if, among other risk factors, they are male, overweight, smoke and drink alcohol.



In a separate analysis, the same researchers reviewed data from another health study to shed light on the effect of disturbed sleep

during different sleep phases on the risk of developing atrial fibrillation in people who did not have sleep apnoea.

However, frequent waking or insomnia, in which a person has trouble falling asleep in the first place, are also responsible for poor quality sleep.

The analysis involving 1,131 people, with an average age of 77, found that those who had less rapid eye movement (REM) sleep than other sleep phases had a higher risk of developing atrial fibrillation.

The researchers looked at data from 3 different US studies that examined the relationship between sleep and irregular heartbeat. They found that:

Disrupted sleep, including insomnia, may be a risk factor for an irregular heartbeat.

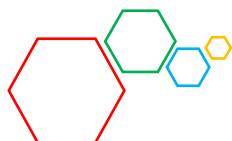
REM sleep is characterised by having rapid eye movements and muscle paralysis, and is when dreams occur.

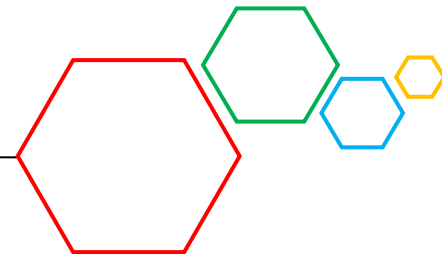
People who say they wake up frequently had about a 26% higher risk of developing an irregular

The researchers say sleep may have an important impact on blood pressure and heart rate, or frequent waking could put extra stress on the chambers in the heart.

Disturbance in sleep can cause an irregular heartbeats.

Sleep apnoea can cause strokes, heart failure and other heart related complications.





The results from both studies are being presented at the American Heart Association's Scientific Sessions 2016. The findings should be treated with caution as they have yet to be published in a peer

reviewed journal in which suitable qualified experts have been able to assess the results.

Source: Published by Peter Russell. Accessed on November 15, 2016.

Regular intake of sugary beverages results in prediabetes.

Adult Americans who regularly consumed sugar-sweetened beverages (roughly one can of soda per day) had a 46 percent higher risk of developing prediabetes compared to low- or non-consumers over a 14-year period, according to a new epidemiological analysis led by scientists at the Jean Mayer USDA Human Nutrition Research Center on Aging (HNRCA) at Tufts University. Higher sugar sweetened beverage intake was also associated with increased insulin resistance, a risk factor for type 2 diabetes.



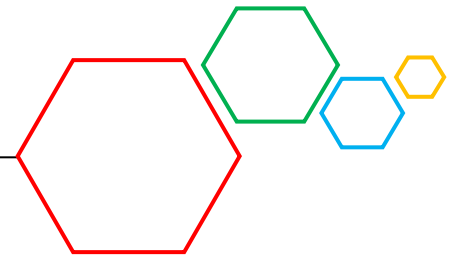
"Although our study cannot establish causality, our results suggest that high sugar-sweetened beverage intake increases the chances of developing early warning signs for type 2 diabetes. If lifestyle changes are not made, individuals with prediabetes are on the trajectory to

developing diabetes," said senior study author Nicola McKeown, Ph.D., scientist in the Nutritional Epidemiology Program at the USDA HNRCA.

"Our findings support recommendations to limit sugar-sweetened beverage intake, which can be achieved by replacing sugary beverages with healthier alternatives such as water or unsweetened coffee or tea," added McKeown, who is also an associate professor at the Friedman School of Nutrition Science and Policy at Tufts. "This is a simple dietary modification that could be of substantial health benefit to people who consume sugary drinks daily and who are at increased risk of diabetes."

The team found those who drank the highest amounts of sugar-sweetened beverages -- a median of six 12 fluid ounce servings a week -- had a





significantly greater risk of developing prediabetes compared to low or non-consumers, after adjusting for factors such as age, sex and body mass index. The highest consumers of sugar-sweetened beverages had roughly 8 percent higher insulin resistance scores, compared to low- or non-consumers after follow-up at seven years. Even after accounting for change in weight and other aspects of diet, the relationships between sugar-sweetened beverages and these metabolic risk factors for diabetes persisted.

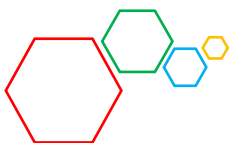
A significant body of research has found associations between regular consumption of sugar-sweetened beverages and increased risk of type 2 diabetes. The new findings now provide evidence of an association

with the major predictor of type 2 diabetes. If diagnosed early, prediabetes is reversible through lifestyle changes such as diet and exercise.

Many other studies and clinical trials that support the health benefits of reducing sugar intake, and we encourage the public to look for healthier options," added Ma, who is currently a postdoctoral fellow at the National Heart, Lung, and Blood Institute of the National Institutes of Health.

Source: Published by Ma et al. Sugar-Sweetened Beverage but Not Diet Soda Consumption Is Positively Associated with Progression of Insulin Resistance and Prediabetes. *J. Nutrition*, 2016; 146:1-7.

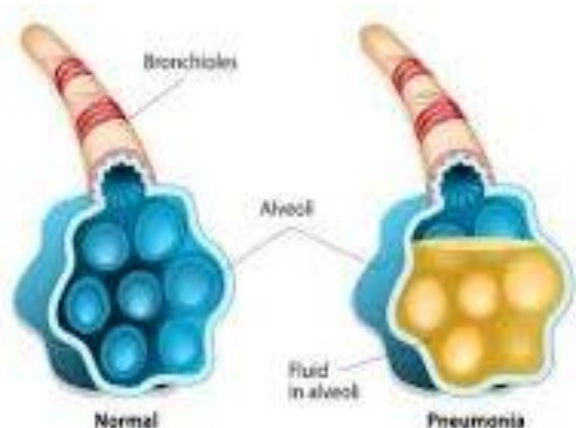
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Pneumonia

PNEUMONIA



Pneumonia is an infection that inflames the air sacs in one or both lungs. The air sacs may fill with fluid or pus, causing cough with phlegm or pus, fever, chills, and difficulty breathing. A variety of organisms, including bacteria, viruses and fungi, can cause pneumonia.

Pneumonia can range in seriousness from mild to life-threatening. It is most serious for infants and young children, people older than age 65, and people with health problems or weakened immune systems.

Symptoms of Pneumonia

Pneumonia symptoms can vary depending on the type of pneumonia the person has, age and health.

The most common symptoms of pneumonia are:

- Cough (with some pneumonias the person may cough up greenish or yellow mucus, or even bloody mucus)
- Fever, which may be mild or high
- Shaking chills
- Shortness of breath



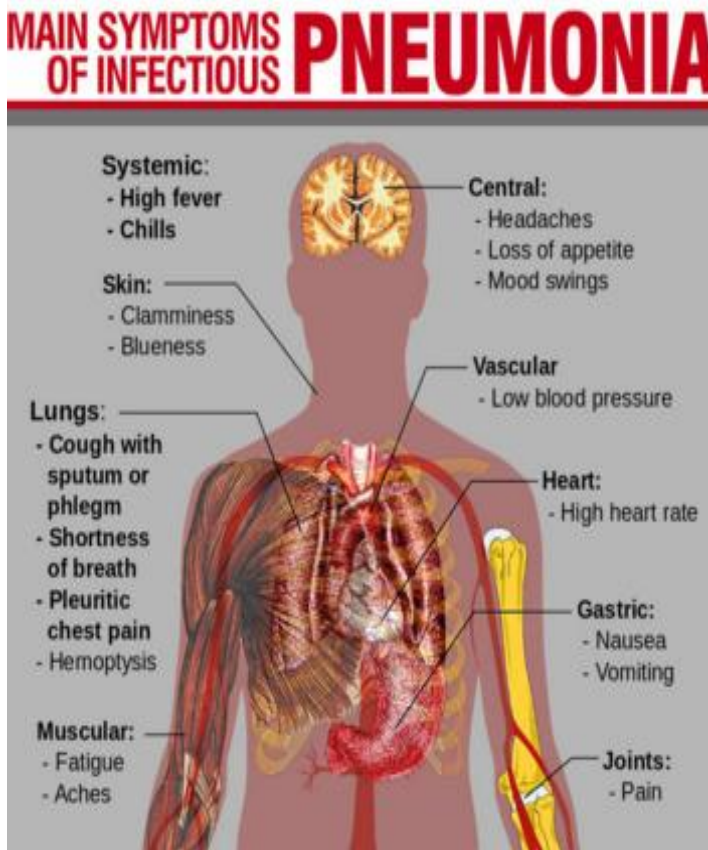
Additional symptoms include:

- Sharp or stabbing chest pain that gets worse when the person breathes deeply or cough
- Headache
- Excessive sweating
- Loss of appetite, low energy, and fatigue
- Confusion, especially in older people

Causes of Pneumonia

Many different germs can cause pneumonia. There are five main causes of pneumonia:

- Bacteria
- Viruses
- Mycoplasma
- Other infectious agents, such as fungi
- Various chemicals

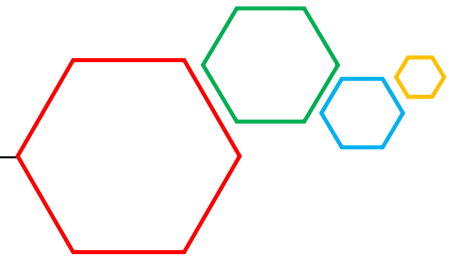


Risk Factors

Risk factors include:

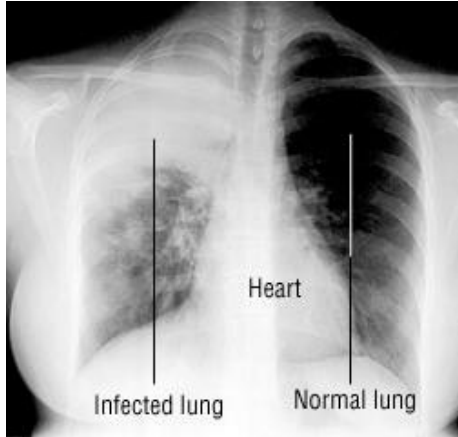
- Cigarette smoking
- Recent viral respiratory infection—a cold, laryngitis, influenza, etc.
- Difficulty swallowing
- Chronic lung disease such as COPD
- Other serious illnesses, such as heart disease, liver cirrhosis, or diabetes
- Living in a nursing facility
- Impaired consciousness
- Recent surgery or trauma
- Having a weakened immune system due to illness, certain medications, and autoimmune disorders





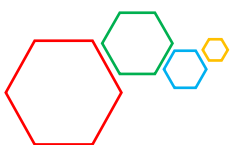
Diagnosis

- Chest X-ray
- Some patients may need other tests, including:
 - Blood test to check white blood cell count and to try to know the germ which may be in blood as well
 - Arterial blood gases to see if enough oxygen is getting into your blood from the lungs
 - CT (or CAT) scan of the chest to get a better view of the lungs
 - Sputum tests to look for the organism (that can be detected in the mucus collected from after a deep cough) causing symptoms
 - Pleural fluid culture if there is fluid in the space surrounding the lungs
 - Pulse oximetry to measure how much oxygen is moving through the bloodstream, done by simply attaching a small clip to the finger for a brief time
- Bronchoscopy, a procedure used to look into the lungs' airways, which would be performed if the person is hospitalized and antibiotics are not working well



Treatment

- Drink plenty of fluids to help loosen secretions and bring up phlegm.
- Get lots of rest. Have someone else do household chores.
- Do not take cough medicines without first talking to your doctor. Coughing is one way your body works to get rid of an infection
- Control fever with aspirin, nonsteroidal anti-inflammatory drugs (NSAIDs, such as ibuprofen or naproxen), or acetaminophen. DO NOT give aspirin to children.
- Make sure to take antibiotics as prescribed



MEDICINAL VALUE



Green Tea

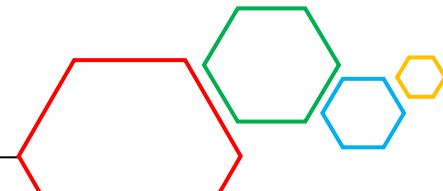
Green Tea is made from the leaves of the *Camellia sinensis* plant. What makes green tea unique compare to other black and oolong teas is the processing procedure: Green tea leaves are steamed instead of fermented, which prevents the beneficial compounds from being oxidized.

Benefits of Green Tea.

The Chinese have known about the medicinal benefits of green tea since ancient times, using it to treat everything from headaches to depression. Recent research has now shown that green tea contains

an active ingredient called epigallocatechin gallate (EGCG) that has powerful anti-oxidant properties. Green tea also contains Catechin Polyphenols which have anti-inflammatory, anti-viral, and anti-cancer properties. Other important ingredients include caffeine, tannin (flavonols), theophylline, theobromine, saponins, carotene, vitamins (A,C,B1,B12,K,P), flouride, iron, magnesium, calcium, strontium, copper, nickel, and zinc. As a result, green tea can be effective in managing a number of common conditions including:





- Lowering LDL cholesterol (bad cholesterol)

The polyphenols in Green Tea may block the absorption of cholesterol by the intestines and instead promote its excretion from the body.



Other conditions include:

- Managing high blood pressure
- Preventing chances of strokes
- Reducing the chances of developing certain cancers
- Strengthening the immune system

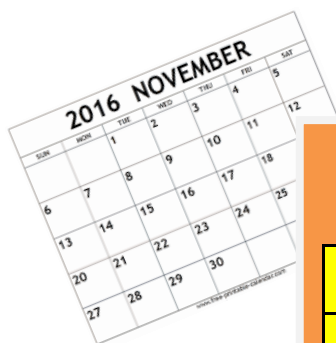
- Promote fat loss
- Diabetes
- Cold
- Rheumatoid Arthritis

Colon).

SUGGESTION: It is suggested that a cup of Green Tea each day may help to alleviate the above mentioned condition.

- **High Cholesterol:**

A recent study suggests that a cup of Green Tea each day may help reduce the levels of LDL (bad) cholesterol while raising the HDL (good) cholesterol level.



IMPORTANT HEALTH DAYS IN NOVEMBER

Date	Observed as
2	World Pneumonia Day
10	World Immunisation Day
14	Diabetes Day
18	World Epilepsy Day
19	World COPD Day
15 to 21	New Born Care Week



JUST FOR LAUGH GAGS CORNER



Mother: "Why did you get such a low mark on that test?"

Son: "Because of absence."

Mother: "You mean you were absent on the day of the test?"

Son: "No, but the kid who sits next to me was."

DIMAG KI BATTI JALAO...

1. What is the one important reason for people having poor sleep?
2. What percentage of one can of soda can cause prediabetes over a 14-year period?
3. I am gentle that even if you take my name I will be broken into pieces. Who am I?

