# Our Daily Breath

A newsletter published by the Pulmonary Rehabilitation Dept. Inter-Community Hospital

Volume XXIX | Number 7

**Emanate** Health<sub>®</sub>

Summer 2022

### **President's Post**



#### **Monthly Luncheons**

As Emanate Health continues to monitor the infection rate of COVID-19 in our local area, there is hope that Breath Savers will be able to start having our monthly luncheons again. This will depend on the current infection rate of COVID and the cooperation of our members. The Executive Board is hopeful we can come back together!

Currently, visitors are required to wear masks and be fully vaccinated with both booster shots. If you do not have all your boosters or flu shot, now is the time to start getting them. *DON'T DELAY YOUR CARE!* 

#### Wear your mask Watch your distance Wash/sanitize your hands

We will also be limited to how many will be allowed to attend as social distancing would also be enforced. This will be in effect as many members of Breath Savers are considered at high risk. If COVID-19 does not flare-up, the Executive Board is hopeful we can get back together and begin some form of normalcy. With no timetable set yet, we are looking at later this fall.

The articles this quarter focus on brain health and memory.

#### Sad News

It is again, that I end this quarter's column on a sad note. Breath Savers lost one of our members, Toni Baiunco. As a member of the Executive Board, Toni contributed to our planning sessions, especially our field trips. She is greatly missed.



Please be well,

**Pat Jones** President, Breath Savers



The following is a summarization of an article written by Candace Pearson, a free-lance writer in Los Angeles. Her article appeared in the Spring 2022 edition of USC Trojan Family magazine. Although the focus is on the Metro Los Angeles region, any area with air pollution can benefit from this article.

Additional information was gathered from the American Lung Association lung.org/clean-air/outdoors/what-makes-air-unhealthy/particle-pollution

s another blue-sky morning dawns in Southern California, Dr. J. Chen prepares for his daily run through his Orange County neighborhood of Fullerton. When the USC physician and epidemiologist steps outside, he spots a gray-brown haze hugging the horizon. He checks the Air Quality Index on his phone and goes back inside.

Just 35 miles north of Dr. Chen, in the City of Glendale, Jennifer Ailshire wonders whether she should hop on her bike and explore the foothills of the San Gabriel Mountains. The USC sociologist clicks on the Air Quality Index on her laptop before deciding it's safe to ride.

In Culver City, located in the western section of Los Angeles County, Lauren Salminen considers the wisdom of hiking in the Santa Monica Mountains. She can see a misty scrim in the distance, but is that morning fog or smog? The USC neurology instructor decides this might be a day for yoga instead. These USC scientists—each an experienced researcher in brain aging—know that air pollution does more that ruin a good workout. Medical science has long recognized the impact air pollution on our lungs, but now research at USC is helping define the environment impact on our brain. Growing evidence links the long-term effects of dirty air to accelerated cognitive decline and dementia.

#### Growing evidence links the long-term effects of dirty air to accelerated cognitive decline and dementia.

So, by protecting our lungs are we also protecting our brain? Basically YES, we are protecting both vital organs. Small particles make a big impact on our bodies. Particle pollution wreaks havoc primarily through systemic inflammation says Caleb Finch, a USC gerontologist and expert on the biology of aging. This exposure can lead to the formation of amyloid plaque on the proteins that form between the brain's nerve cells that are the hallmark of Alzheimer's.

#### What Is Particle Pollution?

Particle pollution refers to a mix of tiny solid and liquid particles that are in the air we breathe. Many of the particles are so small as to be invisible, but when levels are high, the air becomes opaque. Particle pollution is not simple, it is so dangerous that it can shorten your life.

#### **Does Size Matter?**

Particles themselves are different sizes. With some being one-tenth the diameter of a strand of hair, while many are even tinier. Because of their size, we cannot see the individual particles. We can only see and breath the haze that forms when millions of participles blur the spread of sunlight.

So, how does particle size matter? The differences in size matters where particles affect us. Our natural defenses help us to cough or sneeze some coarse particles out of our bodies. However, our defenses do not keep out the smaller fine or ultrafine particles.

Now, these particles get trapped in our lungs, with the smallest particles so minute that they can pass through the lungs into our bloodstream, just like the essential oxygen molecules we need to survive.

With these particles forming in so many different ways, they can be composed of many different compounds. We cannot think of particles as solids. Some are liquid, some are solids suspended in liquids. As the EPA describes these particles as really "a mixture of mixtures." This "mixture of mixtures" differs between different regions in the United States and in different seasons of the year. The sources that produce the particles determines type of pollution. For example, nitrate particles from motor vehicle exhaust forms a larger proportion of the unhealthful polluted air winter in the Western states, especially California and portions of the Midwest. By contrast, Eastern states have more sulfate particles than the West, due to the high levels of sulfur dioxide emitted by large, coal-fired power plants.

#### How Bad is Our Air?

The answer to this question has a bad news, good news response . . .

The **bad news** is that the Los Angeles-Long Beach region ranks first in the nation for ozone pollution and fourth in year-round fine particle pollution, according to the American Lung Association.

The **good news** is that pollution has declined in the last 10 to 15 years nationally and Los Angeles has been a public health success story. USC sociologist, Jennifer Ailshire remarked that "it shows that if we put our minds to it, we can make our environment a healthier place to live."

Jennifer Alishire adds, "Air pollution isn't just a physical characteristic, it's a social phenomenon produced by humans, for the most part."



# TIPS TO PROTECT YOUR MEMORY

This article written by Hope Reese, a free-lance journalist, appeared in the *New York Times* on July 24, 2022

s we age, our memory declines. This is an ingrained assumption for many of us; however, according to neuroscientist Dr. Richard Restak, a neurologist and clinical professor at George Washington Hospital University School of Medicine and Health, decline is not inevitable.

The author of more than 20 books on the mind, Dr. Restak has decades worth of experience in guiding patients with memory problems. "The Complete Guide to Memory: The Science of Strengthening Your Mind," Dr. Restak's latest book, includes tools such as mental exercises, sleep habits and diet that can help boost memory.

#### "Memory decline is not inevitable with aging."

Yet Dr. Restak ventures beyond this familiar territory, considering every facet of memory how memory is connected to creative thinking, technology's impact on memory, how memory shapes identity. "The point of the book is to overcome the everyday problems of memory," Dr. Restak said.

Especially working memory, which falls between immediate recall and long-term memory, is tied to intelligence, concentration and achievement. According to Dr. Restak, this is the most critical type of memory, and exercises to strengthen it should be practiced daily. But bolstering all memory skills, he added, is key to warding off later memory issues. Memory decline is not inevitable with aging, Dr. Restak argues in the book. Instead, he points to 10 "sins," or "stumbling blocks that can lead to

lost or distorted memories." Seven were first described by the psychologist and memory specialist Daniel Lawrence Schacter — "sins of omission," such as absent-mindedness, and "sins of commission," such as distorted memories.

To those Dr. Restak added three of his own: technological distortion, technological distraction and depression.

"We are what we can remember," he said. Here are some of Dr. Restak's tips for developing and maintaining a healthy memory.

#### **Pay More Attention**

Some memory lapses are attention problems, not memory problems. For instance, if you've forgotten the name of someone you met at a cocktail party, it could be because you were talking with several people at the time and you didn't properly pay attention when you heard it.

"Inattention is the biggest cause for memory difficulties," Dr. Restak said. "It means you didn't properly encode the memory."

"Inattention is the biggest cause for memory difficulties." One way to pay attention when you learn new information, like a name, is to visualize the word. Having a picture associated with the word, Restak said, can improve recall. For instance, he recently had to memorize the name of a doctor, Dr. King, (an easy example, he acknowledged). So, he pictured a doctor "in a white coat with a crown on his head and a scepter instead of a stethoscope in his hand."

#### Find Regular Everyday Memory Challenges

There are many memory exercises that you can integrate into everyday life. Dr. Restak suggested composing a grocery list and memorizing it. When you get to the store, don't automatically



pull out your list (or your phone) — instead, pick up everything according to your memory.

"Try to see the items in your mind," he said, and only consult the list at the end, if necessary. If you're not going to the store, try memorizing a recipe. He added

that frequent cooking is actually a great way to improve working memory.

Occasionally, get in the car without turning on your GPS, and try to navigate through the streets from memory. A small 2020 study suggested that people who used GPS more frequently over time showed a steeper cognitive decline in spatial memory three years later.

#### **Play Games**

Games like bridge and chess are great

for memory, but so is a simpler game, said Dr. Restak. For instance, Dr. Restak's "favorite working memory game" is 20 Questions — in which a group (or a single person) thinks of a person, place or object,



and the other person, the questioner, asks 20 questions with a yes-or-no answer. Because to succeed the questioner must hold all the previous answers in memory to guess the correct answer.

Another of Restak's tried-and-true memory exercises simply requires a pen and paper or audio recorder. First, recall all the U.S. presidents, starting with President Biden and going back to, say, Franklin D. Roosevelt, writing or recording them. Then, do the same, from F.D.R. to Biden. Next, name only the Democratic presidents, and only the Republican ones. Last, name them in alphabetical order.

If you prefer, try it with players on your favorite sports team or your favorite authors. The point is to engage your working memory, "maintaining information and moving it around in your mind," Restak wrote.

#### **Read More Novels**

One early indicator of memory issues, according to Dr. Restak, is giving up on fiction. "When people begin to have memory difficulties, they tend to switch to reading nonfiction,"



he said. Over his decades of treating patients, Dr. Restak has noticed that fiction requires active engagement with the text, starting at the beginning and working through to the end. "You have to remember what the character did on Page 3 by the time you get to Page 11," he said.

#### **Beware of Technology**

Among Dr. Restak's three new sins of memory, two are associated with technology.

First is what he calls "technological distortion." Storing everything on your phone means that "you don't know it," Dr. Restak said, which can erode our own mental abilities. "Why bother to



focus, concentrate and apply effort to visualize something when a cellphone camera can do all the work for you?" he wrote.

The second way our relationship with technology is detrimental for memory is because it often takes our focus away from the task at hand. "In our day, the greatest impediment of memory is distraction," Dr. Restak wrote. As many of these tools have been designed with the aim of addicting the person using them, and, as a result, we are often distracted by them. People today can check their email while streaming Netflix, talking with a friend or walking down the street.

All of this impedes our ability to focus on the present moment, which is critical for encoding memories.

#### Work With a Mental Health Professional if You Need to

Your mood plays a big role in what you do or do not remember. Depression, for instance, can decrease memory. Among "people who are referred to neurologists for memory issues, one of the biggest causes is depression," Dr. Restak said.



Your emotional state affects the kind of memories you recall. The hippocampus (or "memory entry center," according to Dr. Restak) and the amygdala (the part of the brain that manages emotions and emotional behavior) are linked—so "when you're in a bad mood, or depressed, you tend to remember sad things," Dr. Restak said. Treating depression—either chemically or via psychotherapy—also often restores memory.

#### Determine Whether There is Cause for Concern

Throughout his career, Dr. Restak has been asked by dozens of patients how they can improve their memory. But not all memory lapses are problematic. For instance, not remembering where you parked your car in a crowded lot is pretty normal. Forgetting how you arrived at the parking lot in the first place; however, indicated potential memory issues.

There is no simple solution to knowing what should be of concern, Dr. Restak says much of it is context-dependent. For instance, it's normal to forget the room number of your hotel, but not your street address. If you are concerned, please consult with a medical expert. Your family physician can refer you to a mental health expert if you feel that is appropriate.

#### SIP THIS FOR BRAIN HEALTH

Drinking 2 to 3 cups of coffee or tea, per day, was linked to an approximately 30% lower risk of stroke and dementia compared with having none, according to a recent study. The stroke risk was cut be 12% to 16%. Drinking either liquid may supply a wider range of brain cell-protecting plant compound.

Please note: More than 400 mg daily of caffeine (3 to 5 cups) exceeds guidelines.

Source: PLOS One, November 16, 2021 Published: *Health Wire CR Consumer Reports* June 2022



## **The Sunshine Corner**

July is:

Independence Day National French Fries Day World Listening Day

National Avocado Day



Life is like a camera. Just focus on what's important, capture the good times, develop from the negatives and if things don't work out, just take another shot. ational los Grasma Da

August is:

National Ice Cream Day

Sisters Day

Forgiveness Day

World Photo Day



September is:

Labor Day National Swap Ideas Day National Guacamole Day Rosh Hashanah



Be kind, for everyone you meet is fighting a battle you know nothing about –Robin Williams

Did you know: Hummingbirds are the smallest migrating bird. The name hummingbird comes from the humming noise their wings make and hummingbirds are the only birds that can fly backwards. It's average weight is less then a nickel and their tongue goes in and out 13 times second. Amazing birds.

July



#### August



September



#### **Emanate Health Inter-Community Hospital**

210 W. San Bernardino Road P.O. Box 6108 Covina, CA 91722-5108

ADDRESS CORRECTION REQUESTED







SENIOR EDITOR:	Pat Jones
ASSISTANTS:	Rita Sullivan Lucy Brejcha
CIRCULATION:	Rita Sullivan
ADVISOR:	Toni Baliton

Items printed in "**Our Daily Breath**" newsletter are from sources we believe to be reliable, but of course, they cannot nor are they intended to replace the care and advice of your own personal physician. Inter-Community Hospital and the "**Our Daily Breath**" newsletter assume no responsibility for any medical treatment undertaken by any individual, and we suggest you check with your physician for applications of any techniques into your personal program.