

WEEK 35, 2020

THE EPOCH TIMES

MIND & BODY

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In 2013, the WHO's International Agency for Research on Cancer found that children are more susceptible to RF radiation exposure than adults.



Lawsuit Challenges FCC Wireless Safety Standards

Groups claim robust science ignored due to close ties between regulator and industry **4**

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THE 'Why I Love America'

ESSAY CONTEST

Our country is in crisis. As statues of great Americans such as George Washington are pulled down, the very idea of the United States, and the value and dignity of the American way of life, is being called into question.

Responding to this challenge begins with each of us being clear about what makes the United States good and beautiful and worth defending. We need to be clear about why we love America.

To this end, The Epoch Times invites you to take part in our "Why I Love America" essay contest.

In an essay of 500 to 800 words, explain what moves you most about the United States—why you think it is worth defending. You may do so in the manner that suits you. For instance, you could focus on one aspect of the United States; take a big picture, comprehensive approach; or simply give an illustrative anecdote from your own life. Make the judges feel that America is worth celebrating.

The grand prize will be \$1,000. Several runners up will receive a year's subscription to The Epoch Times. Any entries may be published online and in print at the discretion of The Epoch Times.

Submissions must be received by 11:59 p.m. EDT on Aug. 21, 2020.

Entries can be submitted in the following ways:

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Email: americanessays@epochtimes.com

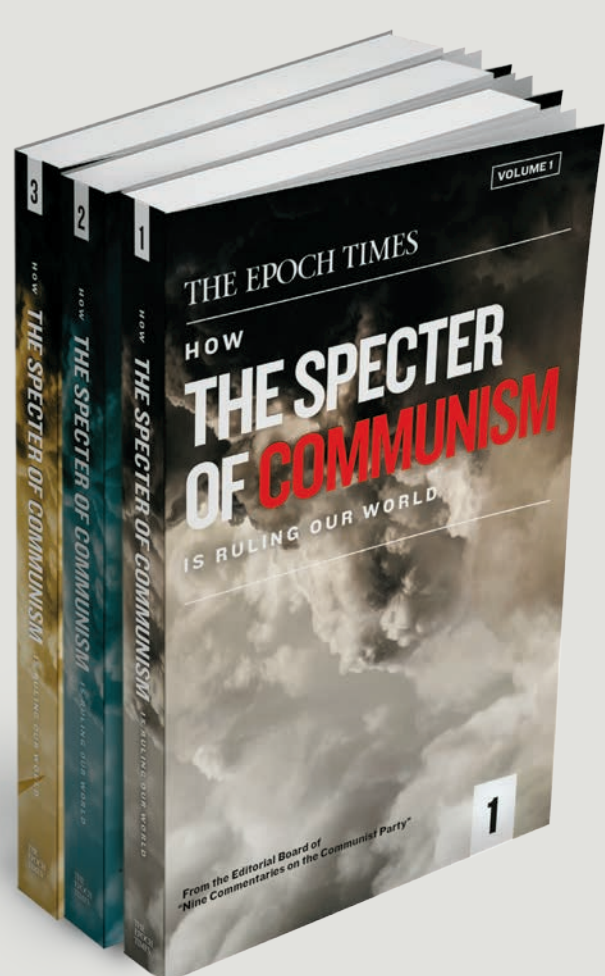
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CHINESE WISDOM FOR SEASONAL LIVING

When the Heat Ends, It's Time to Cleanse Our Minds

Solar Term: 'End of Heat' (Aug. 22–Sept. 6)

MOREEN LIAO

A solar term is a period of about two weeks and is based on the sun's position in the zodiac. Solar terms form the traditional Chinese calendar system. The calendar follows the ancient Chinese belief that living in accordance with nature will enable one to live a harmonious life. This article series explores each of the year's 24 solar terms, offering guidance on how to best navigate the season.

Solar Term: 'End of Heat'

2020 Dates: Aug. 22–Sept. 6

"End of heat" is the 14th solar term. It runs from Aug. 22 to Sept. 6, and it signifies the end of the hot season. It begins when the Sun reaches the celestial longitude of 150° and ends when it reaches the longitude of 165°. Although the sun has moved further away from earth, the heat accumulated within the earth remains plentiful, so according to the folk saying in Chinese, "People will still sweat for 18 days after the arrival of the 'End of Heat.'"

This is the time to review and reflect on all the hard work we've done for our health early in the year, and what outcome it has produced for us.

According to Chinese tradition, three things happen in this solar term. Eagles display and worship the birds they have captured before they eat them. Heaven and earth begin to withdraw, alluding to the end of summer. And grains become ripe.

Symbolically, it is the end of a season, and Mother Nature is turning a new page. "When the weather becomes cool, it is good autumn," is a famous poem in Chinese, and it reflects both the external world and our minds, which is the inner world for an individual. At this time of year, we have just passed the hottest weather, and as we are calming down, we can relax, refresh, and anticipate the harvest that is around the corner.

This is the time to review and reflect on all the hard work we've done for our health early in the year, and what outcome it has produced for us. Our body is preparing to turn toward Yin

and away from Yang, with the help of the rich yields and produce from all the seedlings we started earlier.

Some people may experience dry and irritated skin or dry hair, and some might even suffer from constipation. This is because the long heat of summer has made our body "toasted" both internally and externally. Yin energy is naturally mild and slow to come out, so there may be a gap or disconnection between yang and yin, as the yang energy may have become too dominant.

Living in Harmony With the 'End of Heat'

Among the 12 energy channels, the organ to be focused on during this term is the stomach. What a wonderful arrangement that we can eat plenty of food without feeling guilty! The key is to select the right cooking method, the right seasoning, and the right types of food.

The stomach is like the roots of a plant—it processes the food to support our bodies. As our body still holds a lot of the heat from the summer, we might feel hot and thirsty and tend to consume a lot of cold drinks. When we consume low temperature drinks or food, we might feel very cool and nice as the temperature drops inside our overheated body. But right after this, according to Chinese medicine, the warm blood and energy from the surface of our body will travel to our organs to warm them up, so the skin will then cool down and close our pores. Once our pores close, the heat and sweat will be blocked inside our body and may cause inflammation and congestion inside.

Seasonal Foods and Scents

Food to Eat: Light tea, soy milk, almond milk, oatmeal milk, lukewarm water, honey, fresh-squeezed juice—drink small portions frequently. Spinach and bell pepper, plus all the root vegetables such as carrots, beets, potatoes. Avoid spices such as peppers, garlic, chili, ginger, shallot, leek, anise seed, and fennel.

Essential Oils: Chamomile, nutmeg, cardamom, orange sweet, caraway, dill, ginger, patchouli, melissa, fennel sweet. (Use of ginger and fennel externally produce different results than the internal consumption of their constituents.)

Epoch Times contributor Moreen Liao is a descendant of four generations of traditional Chinese medicine doctors. She is also a certified aromatherapist, former dean of the New Directions Institute of Natural Therapies in Sydney, and the founder of Ausganica, a certified organic cosmetic brand. Visit Ausganica.com

JACOB LUND/SHUTTERSTOCK



We have just passed the hottest weather, and as we are calming down, we can relax, refresh, and anticipate the harvest that is around the corner.



In this handout released by the U.S. Navy, Lt. Wade Miller, from Orlando, Fla., treats a patient aboard the hospital ship USNS Mercy (T-AH 19) in Los Angeles on April 4, 2020.

Lower Vitamin D Levels Linked to Risk of COVID-19: Doctors

Vitamin D's important role in the immune system may explain a correlation to more severe infection

MEILING LEE

While the world waits for a definitive treatment, cure, or vaccine for COVID-19, studies have shown a significant correlation between a low level of vitamin D in the blood and a greater risk of infection.

The findings reveal a need for more robust data to determine whether vitamin D can prevent the disease or be used as an adjunct therapy.

Vitamin D, commonly known as the sunshine vitamin, is a hormone with a vast array of benefits over and above bone and muscle health. It may also strengthen the immune system, protect against cardiovascular disease, help prevent colon cancer, and more. It comes in two major forms: vitamin D3, which is produced by the body, and vitamin D2, which is found in plants.

Pending conclusive evidence on vitamin D's effects on COVID-19, doctors are stressing the importance of people having their levels checked to ensure they have an adequate level of the nutrient.

Dr. Kecia Gaither told The Epoch Times in an email that she screens her patients' vitamin D levels. Women who are pregnant or breastfeeding, in particular, may not have enough vitamin D. And it's even more important now because "patients with adequate vitamin D levels have been found to have lesser morbidity and mortality from COVID-19 than those that were deficient," Gaither wrote.

"Along with vitamin D supplementation, adequate sunshine exposure is needed, particularly if melanated [darker skinned], because vitamin D is made in the skin," Gaither said. "Melanin inhibits vitamin D production in the skin."

Melanin is a skin pigment that makes the skin, eyes, and hair darker. Black Americans are in a high-risk group for having low vitamin D levels because, while their darker skin can protect them against skin cancer, it also reduces the production of vitamin D. Black people have been found to have a higher COVID-19 death rate.

Research by The Cooper Institute observing how fitness and body weight affected vitamin D levels in black adults said: "African American men and women with moderate or high fitness levels were 45 percent



Exposing skin to direct sunlight for 15–30 minutes and eating foods like salmon and white mushrooms can help many people get enough vitamin D.

OKSANA SHUFFRYN/SHUTTERSTOCK

In certain countries, governments or medical institutions have begun recommending that citizens consider taking vitamin D supplements and getting sun exposure.

less likely to have vitamin D deficiency than those with low fitness levels. Additionally, obese African American men and women were 70 percent more likely to have vitamin D deficiency than those who were normal weight."

Lead researcher Steve Farrell said, "Some of the health disparities that we see in African American adults may be partially due to the high prevalence of vitamin D deficiency in this population."

Symptoms and Dosage
Symptoms of vitamin D deficiency may include osteoporosis or bone thinning and weakness, bone and muscle pain, depression, fatigue, and frequent infections or illnesses.

Dr. Mike Hansen, pulmonologist and critical care physician, says in a video on COVID-19 that many "COVID-19 patients who require hospitalization do have low vitamin D levels, and this is consistent with what we're seeing."

To treat vitamin D deficiency, exposing skin to direct sunlight for 15–30 minutes, avoiding sunburns, along with incorporating foods such as salmon, white mushrooms, and cod liver oil may be enough for some people to reach adequate vitamin D levels. For others, a vitamin D supplement is recommended through their physician.

Dr. Abe Malkin wrote in an email to The Epoch Times that generally, a "safe daily supplement dose would be 2,000 IU [international units] daily, but for those who are more deficient, they can take up to 5,000 IU daily." Malkin, who is the founder and medical director at Concierge MD LA, says zinc and vitamin C supplements should be taken at the same time "to help bolster the immune system."

The National Institutes of Health's Office of Dietary Supplements recommends 600 IU for people up to 70 years old, and 800 IU for adults 71 and older.

Dietary supplements are not regulated by the U.S. Food and Drug Association, so they don't need to meet the same strict requirements as medications. To know if you're purchasing a quality supplement, check for a "third-party tested" label on the bottle as well as a USP verification, and choose brands with a good reputation.

It's best to consult with your physician to ensure you're taking the right amount.

D naturally should not take a supplement," Malkin said. "This would be determined by a blood test to check vitamin D levels."

Conflicting Messages From Recent Studies

An observational study that examined the levels of vitamin D in 7,807 people who were tested for COVID-19 in Israel, found that the average plasma vitamin D level was remarkably lower among the 782 who tested positive compared to the 7,025 negatives, showing an independent association between low blood levels of vitamin D and the occurrence and severity of COVID-19. The circulating form of vitamin D in the body is called 25(OH)D, which is tested to determine vitamin D deficiency or toxicity.

But researchers in a study in the UK said that their findings "provided no evidence to support a potential role for (25(OH)D) concentration to explain susceptibility to COVID-19 infection either overall or in explaining differences between ethnic groups." The study recruited 348,598 individuals (but only 449 tested positive for COVID-19) from the UK Biobank to examine whether their plasma vitamin D levels correlated with COVID-19 risk using the participants' baseline 25(OH)D that was recorded 14 years ago, between 2006 and 2010.

The study's use of the participants' baseline measurements from over a decade ago raised concerns from several scientists who co-authored a response arguing that the baseline assessment was not "representative of the current level as concentrations 'generally track over time.'" They concluded that the vitamin D and COVID-19 association still remained unclear, and that "whilst deficiency may not be associated with risk of incidence, it may still be associated with risk of severity, which this paper does not examine."

Not Waiting for Results

In certain countries, governments or medical institutions have begun recommending that citizens consider taking vitamin D supplements and getting sun exposure.

The Scottish government updated its guidance on vitamin D on July 29 stating "it is important that people maintain sufficient levels of vitamin D" and that people in high-risk groups should "take a daily supplement."

The French National Academy of Medicine had already begun stressing the importance of vitamin D against COVID-19 in May. Recommendations the organization made were for anyone under 60 to take a vitamin D supplement of 800–1,000 IU immediately after a COVID-19 diagnosis was confirmed. For adults 60 and older with COVID-19, they should receive a vitamin D testing, "and if deficiency is found, a bolus dose of 50,000–100,000 IU" is given.

Dietary supplements are not regulated by the U.S. Food and Drug Association, so they don't need to meet the same strict requirements as medications. To know if you're purchasing a quality supplement, check for a "third-party tested" label on the bottle as well as a USP verification, and choose brands with a good reputation.

It's best to consult with your physician to ensure you're taking the right amount.

Lawsuit Challenges FCC Wireless Safety Standards

CONAN MILNER

Wireless technology has become an essential part of our world. But what if this modern necessity is also harming our health?

That's the claim in a suit filed against the Federal Communications Commission (FCC).

The case was submitted in February, but two nonprofits—Children's Health Defense (CHD) and Environmental Health Trust (EHT)—jointly filed their opening brief on July 29 in the U.S. Court of Appeals for the District of Columbia. The case challenges the FCC to reconsider its wireless health and safety guidelines that have been in place since 1996.

As wireless use has increased, so has our exposure to the non-ionizing radiation used to carry the data over the airwaves.

When the rules were first written, cellular phones were simple, brick-sized units, and relatively rare. Today, they've morphed into slim, multipurpose devices, kept in our pockets, that are virtually indispensable to nearly everyone. But as wireless use has increased, so has our exposure to the non-ionizing radiation used to carry the data over the airwaves—known as radiofrequency (RF) or microwave radiation. The case alleges that the FCC ignores clear evidence of harm to people and the environment from this ubiquitous technology.

For more than 25 years, regulators have assured the public that FCC safety standards are still effective enough to meet a modern world bathed in a wireless field. They are also confident that even 5G—another, higher-frequency layer of RF radiation with hundreds of thousands of new broadcasting cells installed in close proximity to where people live and work—poses no threat to our well-being. The brief, however, points to evidence of harm at so-called safe levels. Some petitioners attached to the case claim that normal, everyday exposure to wireless has made them so sick that they are forced to retreat from the modern world just to survive.

Heat Hypothesis

In a July 30 press conference for the case, CHD Chairman Robert F. Kennedy explained that the federal standard designating safe levels of microwave radiation exposure—the Telecommunications Act of 1996—states that safety is merely an issue of temperature. Basically, as long as exposure is not enough to create heat, as in a microwave oven, the body suffers no harm. But the case against the FCC urges the agency to take a closer look at the evidence to the contrary.

"We know now, from thousands and thousands of peer-reviewed published studies, that micro-

wave radiation injures the human body and human cells at a tiny fraction of what it takes to raise the temperature of your body," Kennedy said. "It shows a grim inventory of injuries connected to Wi-Fi, including oxidative stress, sperm and testicular damage, cell damage, DNA damage, and neuropsychiatric damage. The neuropsychiatric damage can be so powerful that it can be read almost immediately on EEGs in children, and those effects do not disappear after you withdraw the radiation."

But regulators say these studies fall short. After years of collecting public commentary regarding concerns of harm from wireless technology, the FCC declared that there was nothing substantive enough to change their guidelines. In an over-100-page report from Dec. 19, 2019, the Commission stated that their old standard was sufficient to ensure public safety.

"After reviewing the extensive record submitted in response to that inquiry, we find no appropriate basis for and thus decline to propose amendments to our existing limits at this time," the FCC report states. "We take our duty to protect the public from any potential harm due to RF exposure seriously."

But Dr. David O. Carpenter, director of the U.S. Institute for Health and the Environment and a petitioner in the CHD case, says the heat hypothesis that regulators rely on to determine safety doesn't come from

doctors.

"They derived their information from the Institute for Electronic and Electrical Engineers, (IEEE), and agencies dominated by electrical engineers and physicists, not the kind of people you want to go to if you have a heart attack," Carpenter said. "And yet, these are the people that the FCC take their information from in setting standards that are supposed to be protective of human health."

Carpenter has been warning about the damage wireless poses to public health for several years. He's co-editor of the Bio-Initiative Report—a document compiled by 29 independent scientists and health experts from around the world detailing evidence of harm from wireless radiation.

The Bio-Initiative Report was first published in 2012, but stronger studies have come out since then—notably, a \$30 million study by the U.S. National Toxicology Program (NTP). With support from the U.S. Food and Drug Administration (FDA), the NTP study was designed to be the final word on whether or not wireless causes health problems. The study exposed rodents to a lifetime of cellphone radiation showing that wireless exposure clearly causes cancer, DNA damage, and disrupts the endocrine system.

Another large and important study from Italy's Ramazzini Institute reported similar conclusions. It looked at animal exposure at much lower RF

intensities—well below FCC's safety limits—and still showed clear evidence of cancer.

Such evidence has driven scientists around the world to push the World Health Organization (WHO) to reconsider their evaluation of the health risks related to wireless. In 2013, the WHO's International Agency for Research on Cancer found that children are more susceptible to RF radiation exposure than adults and that "positive associations have been observed between exposure to radiofrequency radiation from wireless phones" and brain tumors, "glioma, and acoustic neuroma."

The agency concluded that radiofrequency radiation was a possible human carcinogen. However, one of the reasons WHO didn't give wireless exposure a stronger warning is lack of animal evidence—an omission the NTP and Ramazzini studies aim to fill. "The evidence for cancer from radiofrequency radiation is overwhelming and absolutely definitive, and yet ignored by the FCC," Carpenter said.

But you're not likely to hear these details of this unsettled science in the mainstream media. Kennedy said one of the most frustrating issues in getting the public to understand the harms related to RF radiation is the powerful influence the wireless industry has in silencing the story. In a world where media companies are often intimately tied to big telecom companies that have a stake in the 5G rollout, such stories are bad for business. Facebook, in particular, admits to censoring criticism of 5G.

"Their metric is not that it's a misrepresentation or that it's not true. Their metric is that it departs from the official FCC government pronouncements of 5G, and that is the ultimate insult to our democracy," Kennedy said. "We know all these things about it, and the only reason they're escaping regulation is through corruption and agency capture, and ultimately through censorship."

Regulators, meanwhile, say doing otherwise would be promoting unsubstantiated claims and would amount to kicking the country when it's down.

In an article in the Washington Post titled "5G Conspiracy Theories Threaten U.S. Recovery," FCC general counsel Thomas M. Johnson Jr. writes that "conjectures about 5G's effect on human health are long on panic and short on science," but activists try "to capitalize on fear and misinformation."

"Paradoxically, such fears are likely to exacerbate suffering during the COVID-19 crisis, because the dislocation caused by the coronavirus pandemic requires strong Internet connectivity to facilitate telework, remote learning, as well as staying in touch with friends and family. Investment in 5G is thus central to the United States' recovery, and it's important for Americans to know that wireless networks are safe," Johnson writes.

Source of an Illness

The legal argument for this case is a debate about what the science says regarding the potential for harm. But for people who already claim to be hurt by wireless technology, the issue is far more personal.

We've all gradually been subjected to greater exposures of wireless radiation over the past 25 years, and most of us seem fine. But there's a long list of symptoms associated with RF radiation exposure—

There's a long list of symptoms associated with RF radiation exposure—from headaches and tingling hands, to nausea and memory loss.

from headaches and tingling hands, to nausea and memory loss. Some cases are mild, but others can be debilitating.

This illness is known as Electro-magnetic Sensitivity (ES) or microwave sickness, and it's hardly a new discovery. Years before cell phones were invented, NASA recognized evidence of microwave sickness in 1980. The condition is also covered by the Americans

“The evidence for cancer from radiofrequency radiation is overwhelming and absolutely definitive, and yet ignored by the FCC.”

Dr. David O. Carpenter, director of the U.S. Institute for Health and the Environment

with Disabilities Act (ADA).

Carpenter says a "significant percentage of the population" already suffers from microwave illness. However, a major problem is that most people won't think to look to their devices as the source of their sickness. In fact, even most doctors are unfamiliar with the harms linked to this technology and the symptoms it can cause.

"It is undoubtedly affecting many people who never thought about the fact that their headaches, the ringing in their ears, their fatigue, their general sense of ill health may be coming from the fact that their Wi-Fi was too strong, that they are on their cell phone too often, that they're too close to a 5G generator out in the street or a cell tower," Carpenter said. "But this is very well documented and an increasing number of people are exposed."

The suit cites more than 100 reports of sickness from FCC-authorized RF/EMF levels. Some include documentary support, including medical diagnoses.

The only known cure for ES is prolonged distance from sources of RF radiation. But as wireless technology spreads, this invisible influence becomes almost impossible to escape. ES suffers from stories of devastating personal and financial harm and disruption to their lives as a result of this exposure, and an inability to live or participate in modern society.

One doctor familiar with the signs of ES is Dr. Tori Jelter, another petitioner in the case, and a pediatrician who sees evidence of the disease in her clinic on a regular basis. She describes the transformation of one 10-year-old child with autism who was completely nonverbal. The child's parents brought him to Jelter because he started to exhibit very aggressive behavior. They thought he might need medication, but Jelter wondered if his environment was to blame.

"Because I had reviewed the literature saying that wireless radiation can profoundly affect behavior, I suggested that they decrease his exposure, and see if that was a contributing factor before starting medication. I recommended they turn off the Wi-Fi router for 12 hours at night, and unplug all cordless phones and see if that made a difference," Jelter said.

"This boy who had never said a word before in his life, within three days, he said a full sentence, and after that gradually improved. The aggressive behavior dissipated."

Another example Jelter gave was of an 8-year-old boy who had a pervasive developmental disorder. As she considered his symptoms, Jelter requested that his parents modify the wireless radiation in the home. Soon after, teachers at his school called the parents in for a meeting. They wanted to know what kind of medication was responsible for such a dramatic improvement.

"In fact, he had improved two grade levels in two months. The parents explained that there was no medication, they just turned off the Wi-Fi router and unplugged the cordless phones," Jelter said. "It's a travesty to children that wireless radiation isn't regulated more. I've written letters to the FCC but nothing happened. It seems like nothing really changes unless you settle things in the court of law, and it's long overdue."

Officials at the FCC didn't immediately respond to a request by The Epoch Times for comment about the case.

Boosting Immune System as Treatment Strategy for COVID-19

Researchers challenge 'cytokine storm' theory and find weakened, rather than hyperactive, immunity in response to virus

JIM DRYDEN

As the COVID-19 pandemic continues to claim lives around the world, much research has focused on the immune system's role in patients who become seriously ill.

A popular theory has it that the immune system gets so revved up fighting the virus that, after several days, it produces a cytokine storm that results in potentially fatal organ damage, particularly to the lungs.

But new findings from a team of researchers led by scientists at Washington University School of Medicine in St. Louis point to another theory and suggest that patients become ill because their immune systems can't do enough to protect them from the virus, landing them in intensive care units. They suggest that boosting immunity could be a potential treatment strategy for COVID-19.

Such a strategy has been proposed in two recently published papers, one published online in JAMA Network Open and the other published online in the journal JCI Insight.

"People around the world have been treating patients seriously ill with COVID-19 using drugs that do very different things," said senior investigator Richard S. Hotchkiss, professor of anesthesiology, of medicine, and of surgery. "Some drugs tamp down the immune response, while others enhance it. Everybody seems to be throwing the kitchen sink at the illness. It may be true that some people die from a hyper-inflammatory response, but it appears more likely to us that if you block the immune system too much, you're not going to be able to control the virus."

The Washington University researchers have been investigating a similar approach in treating sepsis, a potentially fatal condition that also involves patients who simultaneously seem to have overactive and weakened immune systems.

Hotchkiss points to autopsy studies performed by other groups showing large amounts of coronavirus present in the organs of people who died from COVID-19, suggesting that their immune systems were not working well enough to fight the virus. His colleague, Kenneth E. Remy, the



Nurses care for a patient in an intensive care ward treating victims of COVID-19 in Frimley Park Hospital in Surrey, England, on May 22, 2020.

“It may be true that some people die from a hyperinflammatory response, but it appears more likely to us that if you block the immune system too much, you're not going to be able to control the virus.”

Richard S. Hotchkiss, senior investigator, professor of anesthesiology, of medicine, and of surgery

JCI Insight study's first author, compares efforts to inhibit the immune system to fixing a flat tire by letting more air out.

"But when we actually looked closely at these patients, we found that their tires, so to speak, were underinflated or immune-suppressed," said Remy, assistant professor of pediatrics, of medicine, and of anesthesiology at Washington University. "To go and poke holes in them with anti-inflammatory drugs because you think they are hyperinflated or hyperinflamed will only make the suppression and the disease worse."

After gathering blood samples from 20 COVID-19 patients at Barnes-Jewish Hospital and Missouri Baptist Medical Center in St. Louis, the researchers employed a test to measure the activity of immune cells in the blood. They compared the blood of those patients to 26 hospitalized sepsis patients and 18 others who were very sick but had neither sepsis nor COVID-19.

They found that COVID-19 patients often had far fewer circulating immune cells than is typical. Further, the immune cells that were present did not secrete normal levels of cytokines—the molecules many have proposed as a cause of organ damage and death in COVID-19 patients.

Instead of trying to fight the infection by further interfering with the production of cytokines, they tried a strategy that has been successful in previous studies they have conducted in sepsis patients.

Hotchkiss and Remy collaborated with researchers in a small study conducted in seriously ill COVID-19 patients who were hospitalized in Belgium. In that study, which was reported on in the JAMA Network Open paper, the COVID-19 patients were treated with a substance called interleukin-7 (IL-7), a cytokine that is required for the healthy development of immune cells.

In those patients, the researchers found that IL-7 helped restore balance to the immune system by increasing the number of immune cells and helping those cells make more cytokines to fight infection.

The research did not demonstrate, however, that treatment with IL-7 improved mortality in COVID-19 patients.

"This was a compassionate trial and not a randomized, controlled trial of IL-7," Remy explained. "We were attempting to learn whether we could get these immune cells working again—and we could—as well as whether we could do it without causing harmful effects in these very sick patients—and

there were none. As this was an observational study involving a small number of patients who already were on ventilators, it wasn't really designed to evaluate IL-7's impact on mortality."

Studies focused on boosting immunity and improving outcomes among the sickest COVID-19 patients are just getting underway in Europe, and similar trials are starting in the U.S., including at Washington University.

Hotchkiss said that finding ways to boost the immune response should help not only in COVID-19 patients but when the next pandemic arises.

"We should have been geared up and more ready when this pathogen appeared," he said. "But what Ken and I and our colleagues are working on now is finding ways to boost the immune system that may help people during future pandemics. We think if we can make our immune systems stronger, we'll be better able to fight off this coronavirus, as well as other viral and bacterial pathogens that may be unleashed in the future."

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Placebos Cut Distress—Even When You Know They're Placebos

New research finds nondeceptive placebos have impact, despite patients knowing they are fake

CAROLINE BROOKS

Placebos can reduce brain markers of emotional distress even when people know they are taking them, researchers report.

Scientists have long documented that people often feel better after taking a treatment without active ingredients simply because they believe it's real—known as the placebo effect.

Now, evidence shows that even if people are aware that their treatment is not "real"—known as nondeceptive placebos—believing that it can heal can lead to changes in how the brain reacts to emotional information.

"Just think: What if someone took a side-effect-free sugar pill twice a day after going through a short convincing video on the power of placebos and experienced reduced stress as a result?" said Darwin Guevarra, a postdoctoral fellow at Michigan State University and lead author of a new study in Nature Communications. "These results raise that possibility."

Researchers tested how effective nondeceptive placebos are for reducing emo-

tional brain activity.

"Placebos are all about 'mind over matter,'" said co-author Jason Moser, professor of psychology. "Nondeceptive placebos were born so that you could possibly use them in routine practice. So rather than prescribing a host of medications to help a patient, you could give them a placebo, tell them it can help them and chances are—if they believe it can, then it will."

To test nondeceptive placebos, the researchers showed two separate groups of people a series of emotional images across two experiments. The nondeceptive placebo group members read about placebo effects and then researchers asked them to inhale a saline solution nasal spray.

The researchers told the participants the nasal spray contained no active ingredients but would help reduce their negative feelings if they believed it would. The comparison control group members also inhaled the same saline solution spray, but were told that the spray improved the clarity of the physiological readings the researchers were recording.

The first experiment found that the nonde-



Nondeceptive placebos offer genuine psychological effects.

ceptive placebos reduced participants' self-reported emotional distress. Importantly, the second study showed that nondeceptive placebos reduced electrical brain activity reflecting how much distress someone feels to emotional events, and the reduction in emotional brain activity occurred within just a couple of seconds.

"These findings provide initial support that nondeceptive placebos are not merely a product of response bias—telling the experimenter what they want to hear—but represent genuine psychobiological effects," said co-author Ethan Kross, a professor of psychology and management at the University of Michigan.

The researchers are already following up on their data with a real-life nondeceptive placebo trial for COVID-19 stress.

Additional co-authors are from Dartmouth College.

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We all feel alone at some time, as if no one really understands us. And in many ways, that is true. But accepting this reality also eases its burden.

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MINDSET MATTERS

When Ego Gets in the Way of Love

Our efforts to share our experience can sound like criticism

NANCY COLIER

Jill and her husband had attended a friend's party, and Jill came home upset. Her husband's friendliness—and what looked like flirtation—with another woman kept her awake all night, feeling hurt, angry, and threatened. She knew her husband loved her; she wasn't worried that he would cheat. Still, the whole thing made her feel bad.

She tried to let it go, not wanting to create a conflict and upset the “good stretch” they were in. She was worried about how her husband would react to her insecurity. But, after a few days of stuffing it down, her hurt feelings were still sitting heavy on her mind and heart. And worse, they were turning into resentment—a narrative about her husband that started with “how could he, how dare he” and the like. She knew she had to say something when she found herself obsessively ruminating and snapping at him over small things.

A few days later, she decided to “risk it” and be honest. Over a nice dinner, Jill shared her feelings with her husband, saying that while she trusted he wouldn't cheat, nonetheless, his being holed up with this other woman all evening in the corner of the room made her feel afraid and hurt. Most of all, it triggered her fear of abandonment and inadequacy, her sense of being “not pretty enough, not young enough, not cool enough, not anything enough.” Jill's own father had left the family when she was young, something her husband was aware of and of which she reminded him. She spoke openly about how his choice to spend the evening enjoying this other woman triggered her deepest insecurity.

Sadly, her husband's reaction wasn't the warm reassurance she had hoped for and needed. Rather than saying the loving words she craved—that he cherished her and would never leave her—he angrily questioned her use of the terms “holed up,” “in

the corner of the room,” and “enjoying this other woman.” He rejected her description of his actions and accused her of calling him unfaithful and assuming the worst about him. When she defended herself, he told her that she was “nuts.” He said she was overly sensitive and had to get her jealousy under control. Moreover, he said that he was sick and tired of being monitored.

The conversation (which was never really a conversation) ended with his saying, “Nothing I do is ever enough for you,” and the couple retreated to their separate rooms.

Some version of this scenario plays itself out in every relationship I've ever seen or experienced. One partner shares his or her experience, longing to feel less alone in his or her pain, to be reassured and comforted, and to move the relationship into something more real and connected. But the result is a further wounding experience. He or she ends up feeling misunderstood, and more alone. The other partner's anger and criticism then obstructs and adds to the original pain.

These kinds of tragic “misses” happen in every relationship. We open a conversation with the desire to feel understood and known. But before we know what happened, we're in a huge fight with our partner, tangled up in a lifetime of suffering. Instead of feeling more connected, we feel profoundly cut off. Instead of feeling understood, we feel rejected. We started out feeling hurt and ended up accused of doing the hurting. We are miles from the empathic embrace we were craving.

Emotional safety is a universal human longing. We yearn for someone we can be completely open with, and harbor a deep ache to be known. We want to express our real thoughts and feelings without being criticized or blamed.

As a therapist, I hear this same longing from people of every age group, race, gender, and socioeconomic background. The longing is to not have to twist our truth into a pretzel so as to make it palatable, to not have to silence our experience to maintain the relationship and the other person's ego. We long to be heard without judgment. And yet, even as we are denied this kind of openness, we also have difficulty offering it to our partner.

The Persian poet Rumi once wrote: “Out beyond ideas of wrongdoing, and right-doing, there is a field. I will meet you there.” He described our longing for full acceptance so beautifully. Despite our longing and effort, again and again we find ourselves in

the loneliest of places, feeling unloved and unknown. Worse, we feel unknowable. We question whether there is anywhere we can be received wholly, without judgment, and without having to fight vigilantly to get there. What we know is that we're failing to gain entry into that union we crave, where egos fall away and the love is big enough to hold all our separate stories.

We want unconditional love, but seem relentlessly stuck in the conditional.

A part of this pain is simply failing to accept the basic reality of being a human being.

Emotional safety is a universal human longing.

As human beings, we are condemned to live in separate bodies and separate minds, which makes for different thoughts, feelings, and experiences. We live in different realities, with different relative truths.

We expect something different, especially in our closest relationships. We expect our partners to have an expansive understanding and acceptance of us, and then create a great deal of suffering when that expectation isn't fulfilled.

When we are truly open, we are often denied the understanding we need. Our truth ends up bumping into our partner's ego, their protective armor. They, too, feel misunderstood, expecting us to also have an expansive understanding and acceptance. The result is that our experience sounds like an accusation because it doesn't reflect what they expect us to already have understood. And so they respond with anger and defensiveness.

Our experience signals a threat to our partner. We find ourselves at war with their ego and simultaneously tangled up in our own ego. We're in a life and death battle with our partner's “me,” their wounds and storylines.

We're trapped inside the claustrophobic separateness of our own little “me,” battling with another trapped and wounded little “me.”

It's important to accept that all people suffer in this inevitable form of isolation, that it's a core aspect of the human experience and a consequence of the terrible inadequacy of words and gestures to convey who we truly are, even to those we are closest to.

When we share our experience, we are sending an invitation to our partner to meet us beyond the words, in that expansive field of truth. It's an attempt to bridge the divide between two people. Our truth is a path out of the isolation we all face as separate human beings. We offer our truth to our partner in search of love.

This attempt is important—and there are certain things we can do, ways we can communicate, that will improve our chances of receiving the kind of acceptance and love we crave. We'll discuss that in a future article.

Nancy Colier is a psychotherapist, interfaith minister, author, public speaker, and workshop leader. A regular blogger for Psychology Today and The Huffington Post, she has also authored several books on mindfulness and personal growth. Colier is available for individual psychotherapy, mindfulness training, spiritual counseling, public speaking, and workshops, and also works with clients via Skype around the world. For more information, visit NancyColier.com

Psychological Stress Associated With Chest Pain in People With Heart Disease

Study links brain's reactivity to stress, an important consideration for angina treatment, say researchers

MAT LECOMPTÉ

Psychological stress found in the inferior frontal lobe of the brain could have an association with chest pain in people with heart disease, according to research released in the journal *Circulation: Cardiovascular Imaging*.

The study was designed to examine how activity in the inferior frontal lobe of the brain affects the severity of angina.

Angina is chest pain or discomfort due to inadequate blood flow to the heart. Angina can occur because of coronary artery disease, but researchers don't know much about the relationship between brain mechanisms when mental stress is present. This study was able to find a link between psy-

chological factors and chest pain.

“Our study sought to understand the degree to which health care providers should incorporate stress and other psychological factors when evaluating and treating angina,” said lead investigator Amit J. Shah, M.D., M.S.C.R., assistant professor of epidemiology at Emory University's Rollins School of Public Health in Atlanta. “Although brain imaging during a mental stress challenge is not a test that can be ordered in clinical settings, the study shows an important proof-of-concept that shows the brain's reactivity to stress is an important consideration when considering angina treatment.”

For the study, a total of 148 people with coronary artery disease were followed from 2011 to 2014. The participants consisted of 69 percent men and 31 percent women, with an average age of 62. Each person was tested in a clinical setting for mentally stressful events while having brain and cardiac imaging.

All participants were assessed with three tests that were given

CONNECT TO LEAD

What's the Value of a Handshake?

The habits of social connection are disappearing and the cost could be severe

SCOTT MANN

What's the value of a handshake? That question has been on my mind for several days.

A couple of weeks after this pandemic kicked off, I started talking to leaders about my concerns around social distancing. I felt like we should have named it “physical distancing” because humans seek meaning. We are emotional and social—wired to connect.

We thrive in times of chaos by our ability to form groups to overcome whatever is thrown at us.

Our ability to connect (thanks to the social capital that we build in our communities and works places) often determines how we will navigate the world when things fall apart. I've been thinking about the impact of social distancing on that human reality. I am concerned about how it will affect the world that we hand our kids. I saw it on full display at my son's recent baseball tournament.

In any sport, for as long as I can remember when the game is over, the two teams line up and shake hands. All the players and coaches shake hands, and it's one of the greatest and most natural displays of sportsmanship and human connection in the world.

As refreshing as it is to see that, because of COVID-19, we can't have kids touching each other or shaking hands. So, what they did was stand at the dugout, take off their hats, and tip their hats to the other team. There was no contact—it was just a gesture, almost like a salute. It struck me that this is the world we live in now.

In this last tournament, I started to notice that the other teams weren't reciprocating this gesture. The game would end, they would go to the dugout, and quickly forget about the team they just played.

There was no closing connection between these two groups that had just met on the field and earned each other's respect. There was no passing of social currency. They just got their gear and walked out.

In the last game my son played, they got beat by one run. It was hard to watch. To my genuine satisfaction, my son's team walked out of the dugout and they tipped their



COVID-19 may prevent handshakes for some, but we can still find ways to affirm our regard and respect for each other.

hats. And it was obviously hard for them to do.

The other team didn't even see it because they were already putting their gear up. This disconnect hurt. We're better than this. We're better together. I'm not saying that we need to run out and shake each other's hands or violate distance protocols. But there is a cost to social distancing.

Our ability to connect often determines how we will navigate the world when things fall apart.

There is a cost to the separation that we're creating. If we're not mindful of it and how this impacts us at a community level, then we risk generating distrust, disengagement, and conflict. We have to decide how we're going to lead.

This is not some grandiose strategic gesture, this is me talking to you about how are we going to lead our children, our baseball teams, our kids, our communities, and how we interact with each other.

Will we shake hands again one day? Will we insist that we come back together and close these gaps? Because if we don't, we just assume that somebody else is going to ride down the hill on a horse and make that happen.

It's not going to happen.

It really hit me this weekend as I watched the centuries-old tradition of a handshake just evaporate. I realized that we're going to need to consciously create connection. We will need to put in effort to come back together and overcome the separa-

tion and disconnection now spreading like a virus.

If we don't, we'll have lost an essential wealth of social currency that we will need desperately when the next crisis comes screaming across the fruited plains.

And if next one is bigger and badder than the last, which is very possible, we will need each other to get through it.

Human connection. I guess that's the “rooftop I'm going to die on”: finding a way from my lessons as a Green Beret to bring our communities back together on the other side of this thing.

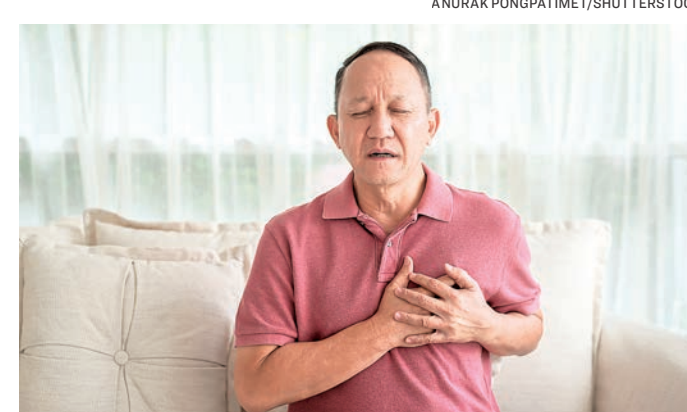
If we're not thinking about that now, if we're not looking for ways to adjust our mindset toward connection, even with something as simple as a tip of the hat, then we've already lost.

But I think that we can do it—if we wake up to it. We have to stop waiting on someone else to give us permission to lead the way.

Don't let the handshake be something that goes extinct. Don't let social distancing and fear warp your mindset. There will be a time and place when we can have that kind of contact again, but in the meantime, let's find other ways to stay connected and model that for our kids. If we don't fight for it, conflict will grow and isolation will dominate.

This is what a connection mindset is all about, and this is where we have to go. That's the rooftop I'm going to. I'll see you on the rooftop.

Scott Mann is a former Green Beret who specialized in unconventional, high-impact missions and relationship building. He's the founder of Rooftop Leadership and appears frequently on TV and many syndicated radio programs. For more information, visit RooftopLeadership.com



Researchers found that the top three factors that explained angina frequency were all stress-related.

pared to those who had no chest pain during the tests. A significant association was also found between inferior frontal lobe activation during stress and the change in angina frequency at the two-year follow-up. Researchers believe this may suggest that brain-related changes might predict worsened future angina.

Emotional Regulation

The inferior frontal lobe of the brain is the area of the brain associated with emotional regulation and stress. Normally, physicians focus on the blood flow to the heart, but this study helps to outline the importance of the activity of the inferior frontal lobe when dealing with angina. Researchers found that the top three factors that explained angina frequency were all stress-related. These included brain activation, depressive symptoms, and post-traumatic stress disorder symptoms.

This study can help physicians with treatments and risk prevention for angina. With the rise in psychological stress in everyday life, health care providers need to understand the associations it may have on all health concerns.

Mat Lecompte is a freelance health and wellness journalist. This article was first published on Bel Marra Health.

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POSITIVE AGING

Vanity Isn't Just for the Young: Part 2



Senior celebrities who age gracefully set an example of accepting the inevitable

MARILYN MURRAY WILLISON

I don't know about you, but I just love it when older celebrities choose to embrace their age rather than try to look several decades younger. Recently, there has been a spate of photographs circulating on the internet of famous seniors who are vibrant, active, and (really) attractive—even though years ago, they moved into what the entertainment industry considers the retirement-status wasteland. From Robert DeNiro to Julie Christie to Jack Nicholson—all of whom are in their 70s—a growing number of talented actors have turned the art of acknowledging and accepting one's age into a worthy cause. And don't even get me started on the appeal of 80-something screen icons such as Michael Caine, Julie Andrews and Robert Duvall, and whether or not these living legends have "had some work done," as they say in Hollywood. They've obviously—and wisely—chosen to accept and embrace the process of ag-

ing rather than pretend they're decades younger. Leslie Caron, the ingenue of the classic film "An American in Paris," is now 85 and was recently interviewed by Jane Pauley for "CBS Sunday Morning." Take it from me: She was amazing. I just love it when an older woman loves herself, is comfortable with her looks, and radiates confidence. From Caron's hair, with plenty of visible white, to her mildly creased face to her understated clothes, she obviously knew two very important things. First, that she should be comfortable being a woman of a certain age. Second, that her appeal had far more to do with her lively aura than her age. It was so refreshing to see a mature movie star whose charm and grace have surpassed the need to be forever young. Fortunately, there are lots of savvy celebrities who simply want to look good for their age rather than appear as a facsimile of who they used to be. Did you know that when "The Force Awakens" was released, a number of fans

criticized Carrie Fisher's appearance, saying she hadn't aged well since her first performance as Princess Leia in 1977? Fisher was quick to respond to their negative comments with this laudable statement: "Youth and beauty are not accomplishments; they're the temporary happy byproducts of time and/or DNA." In my opinion, her appearance was both appropriate and attractive for a soon-to-be 60-year-old woman—actress or otherwise. Another iconoclastic heroine is 85-year-old Harvard professor Anne Bernays, a great-grandmother who found a way to avoid the stigma of being among the older and overlooked women in our culture. In her NPR essay about dying her hair electric blue (as opposed to "wussy blue-rinse blue"), she observed: "While young people sparkle like diamonds, old folks are invisible—except, as I discovered, if you have bright blue hair. ... Sadly, vanity and its companion, the compulsion to shave years off your age, do not go away as you get older. ... why do

we behave as if our appearance trumps kindness, intelligence, imagination, enthusiasm, and humor?" Indeed. Why do we?

A number of years ago, I happily made a conscious decision to define and describe the things that made me feel good about myself, regardless of my chronological age.

Celebrities or not, let's always find a way to fondly remember Nora Ephron's best-selling memoir, "I Feel Bad About My Neck: And Other Thoughts on Being a Woman."

This remarkable little book chronicles many of her expensive and time-consuming efforts to fight the visible signs of aging. Who among us could forget her wry observation that "Anything you think is wrong with your body at the age of 35, you will be nostalgic for at the age of 45?"

What better argument could there be for ignoring the numbers that others use in their attempt to categorize us? A number of years ago, I happily made a conscious decision to define and describe the things that made me feel good about myself, regardless of my chronological age. May I suggest that no matter how young or how old or how vain you might be, you try to do the same?

Marilyn Murray Willison has had a varied career as a six-time nonfiction author, columnist, motivational speaker, and journalist in both the U.K. and the U.S. She is the author of "The Self-Empowered Woman" blog and the award-winning memoir "One Woman, Four Decades, Eight Wishes." She can be reached at MarilynWillison.com. To find out more about Marilyn and read her past columns, please visit the Creators Syndicate webpage at Creators.com. Copyright 2020 Creators.com.



It's tempting to focus on the suffering life inflicts on you, but it's much better to focus on what you can do about it.

MINDSET MATTERS

Gain Control and Break the Victim Mentality

How to empower yourself, end the 'poor me' cycle

NANCY COLIER

A victim, according to the dictionary, is a person who has been tricked, duped, harmed, injured, or killed as a result of a crime, accident, or other events. Everyone experiences one or more of these things during their lifetime—if not physically, then emotionally. We're all victims, at times, of life's challenges and difficulties. It's psychologically healthy for us to acknowledge the suffering and feelings of powerlessness that accompany these experiences. And yet, someone who feels like a victim in a particular situation is radically different from someone who suffers from a victim mentality and maintains a victim identity. We all know people who seem to be constantly recounting some injustices done to them—how others are denying them what they need, want, and deserve, or controlling them against their will; even how life is against them and the universe is punishing them. Maybe you, yourself, are someone who experiences life this way. To always feel like a victim of life, or to love someone who feels they're the victim of life, is painful and difficult. Here are three case studies to illustrate some of the most common forms of victim mentality and what they reveal.

Continued on Page 11

Someone who feels like a victim in a particular situation is radically different from someone who suffers from a victim mentality and maintains a victim identity.



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**It takes students 43 hours
and adults 94 hours to turn
acquaintances into casual friends.**

ELIOTT REYNA/UNSPLASH



How Long Does It Take to Make a Friend?

A new study tries to shed light on the process of friendship-building

KIRA M. NEWMAN

Making friends can be daunting, something I recently found out after moving to a new city. You might hit it off with an acquaintance, but what's the next step? And how long does it take to move past getting to know someone into actual friendship. Unfortunately, there's no manual for this crucial life skill.

But University of Kansas researcher Jeffrey A. Hall has helped demystify the process of friendship-building in a new study published in the *Journal of Social and Personal Relationships*. It's the first to explore not just what activities bring us closer to prospective buddies, but exactly how many hours it takes for an acquaintance to become a friend.

Hall surveyed 112 college students every three weeks during their first nine weeks at a Midwestern university. He also gave a one-time questionnaire to 355 American adults who had moved to a new city in the past six months. In these surveys, the newcomers picked a friend or two and reported how much time they spend together, what activities they do, and how close the friendship is (how emotionally close and committed they feel, and how much they admire their friend's unique traits).

Unsurprisingly, the more time two people spent together, the closer their relationship. Through his analysis, Hall was able to approximate how many hours it took for different levels of friendship to emerge:

- It takes students 43 hours and adults 94 hours to turn acquaintances into casual friends.
- Students need 57 hours to transition from casual friends to friends. Adults need, on average, 164 hours.
- For students, friends became good or best friends after about 119 hours. Adults need an additional 100 hours to make that happen.

"Everyone wants to have friends, but you can't have friends without making them," says Hall. "Making friends takes time."

Why does it take adults so much more time to make friends than students? Hall speculates that there might be something about student life that facilitates friendship—perhaps the close quarters of college living fosters fast connections. It could also be that college students overestimate how deep

their friendships are.

But time on its own does not breed intimacy. It depends how we spend that time, as Hall found when he analyzed what activities friends did together.

Talking, it turns out, can be hit or miss. In general, spending more time talking didn't make student or adult friends feel closer. But student friends did tend to be chummier when they engaged in certain types of talking—namely, catching up about their lives, talking playfully, having serious conversations, and showing love, attention, and affection. Student friends who engaged in small talk—about current events, pets, sports, movies, or music—actually tended to become more distant over time.

Shared activities don't always help us bond, either. For study participants, spending time together on shared interests or projects—such as traveling or exercising, partying or shopping, joining teams or groups, or going to church—didn't seem to move the needle on feelings of closeness. Nor did spending time together at work or school, places you're obligated to be anyway. But a few activities were more common in closer friendships: relaxing and hanging out and (for adults) watching movies and playing video games.

In other words, much as we might wish for one, there may be no set formula for making a friend.

Ultimately, this research underscores that friendship is an investment. Time spent with one potential comrade is time you can't spend with another, and those hours matter. For students who were able to turn an acquaintance into a casual friend or a friend into a good friend during the study, they (on average) doubled their number of hours in that person's company. Meanwhile, they spent half as much time with other friends, and those friendships didn't evolve.

"You have to work on the ones that count," says Hall. "Time spent together, especially leisure time, can be thought of as an investment toward future returns on [satisfying our need for belonging]."

That investment can take months, as I saw firsthand after moving. As Hall points out, friendship isn't a one-sided endeavor. Some connections will peter out, while others will flourish—and it's not always in our control.

Kira M. Newman is the managing editor at the Greater Good Science Center. This article was originally published on the Greater Good online magazine.

MINDSET MATTERS

Gain Control and Break the Victim Mentality

Life is hard, and it's even harder with a victim mentality.

Continued from Page 9

Case 1

Mary and her husband, Phil, are going on vacation. Mary has done all the booking and travel planning and has asked Phil to confirm the taxi pick-up time. The morning they're scheduled to leave, Phil nonchalantly mentioned that the car was confirmed for a time that may be too late to assure making the flight. Mary asked Phil if he could correct the time, to which he responded that she had no reason to worry and changing it was unnecessary.

Mary was frustrated, confused, and angry. In response, she decided to do nothing about the car pick-up time and opted to stew in anger at her husband instead. She spent the next few hours constructing her victim narrative, in which Phil is controlling her and stealing her vacation—the one she booked, earned, and deserved. As she saw it, Phil's decision to not change the pick-up time rendered her powerless, helpless to get what she wanted. She decided to take the chance and kept the pick-up time as is. She chose to potentially miss the flight and give up her vacation—all to hold true to her victim identity and prove her husband wrong.

Analysis: Peter's victim mentality is caused by a sense of powerlessness that's unrelated to the situation. Someone like Peter starts out feeling powerless and then projects that onto the other, who becomes the one "controlling" him. Peter is unable to tolerate his daughter's discomfort without feeling responsible for fixing it. He's also lacking an awareness or curiosity about the root of his feeling of powerlessness—which was already there before the situation arose. And, similar to Mary, what's missing is an ability to respect his own needs and wants, which include not wanting to spend the day fixing the furnace.

Case 2
Lisa hasn't had a day off in a month, partly due to her own choice and partly because of the company's busy season. When the much-awaited day off finally came for her, she woke up to the sound of rain on her roof. Lisa spent the first two hours of her

stead of taking charge of getting what she wanted, which would have been as simple as changing the pick-up time, she used her energy to mentally fight with her husband about why he was destroying her vacation.

Case 2
Peter's narrative of his life is that he's controlled by others and always has to follow their demands, which is never up to him to decide. On a recent morning, his daughter expressed feeling cold and asked if he could fix the heat, since it seemed to be not working properly. This sent Peter into a full victim mentality and its accompanying resentment.

He felt that he was being intentionally controlled by his daughter, and was now forced to spend the whole day fixing the heating system so that she wouldn't have to feel uncomfortable. He was also convinced that if he didn't immediately fix her problem, he would be punished and blamed for her unhappiness. He was, once again, a victim to everyone else's needs with no say of his own.

Analysis: Peter's victim mentality is caused by a sense of powerlessness that's unrelated to the situation. Someone like Peter starts out feeling powerless and then projects that onto the other, who becomes the one "controlling" him. Peter is unable to tolerate his daughter's discomfort without feeling responsible for fixing it. He's also lacking an awareness or curiosity about the root of his feeling of powerlessness—which was already there before the situation arose. And, similar to Mary, what's missing is an ability to respect his own needs and wants, which include not wanting to spend the day fixing the furnace.

Case 3
Lisa hasn't had a day off in a month, partly due to her own choice and partly because of the company's busy season. When the much-awaited day off finally came for her, she woke up to the sound of rain on her roof. Lisa spent the first two hours of her



morning—her first free day in a month—thinking about how God is always punishing her and the universe is against her. All she wanted was to lay outside on a blanket. Was that too much to ask? Obviously.

Analysis: Lisa's victim mentality is a kind of negative narcissism. That is, a belief that the universe and other people's behavior revolves around her. Everything happens for, against, and in relation to her. She believes that God and other people share a primary intention to punish her.

How to Break Away From Victimhood
There are many things you can do to change your own victim mentality. You can also suggest these approaches to the perpetual victim in your life.

1. Take responsibility for your own needs and wants. Determine what you want and what's important to you. Name it and do what you need to make it happen—for yourself. Don't waste time blaming those who don't want the same things you do, and don't wait for them to come on board or help you. Get busy taking care of what's important to you and leave others out of it.

2. Practice saying no. If you don't want to do something and don't (realistically) have to do it, just don't do it. Remember that you're allowed to have needs, just like other people.

3. Stop blaming. When you hear yourself blaming, whether it's other people, the world, life, or whomever, say "stop" to yourself out loud, and actually turn your attention away from the blaming thoughts.

4. Find the root of your sense of powerlessness. Before you construct the next narrative on who's stealing your power, get curious about the underlying feelings of powerlessness that precede all situations.

5. Be kind to yourself. When you're blaming the universe and life for your suffering, you're not actually helping yourself feel better. By claiming the victim role, you are intensifying your pain. With the victim identity in play, you're not only suffering because of whatever happened, you've now added the thought that you're cursed, that life and everyone are out to get you and that the universe hates you. (Feel better?)

6. Turn your focus to helping others. When you wallow in victim mentality, the whole world is about you and your pain. Instead, acknowledge your suffering with kindness and then consider how you can help others. As counter-intuitive as it may be, the more you feel deprived, the more you need to give. Offering kindness is the surest antidote to "poor me."

7. Practice gratitude. The victim mentality focuses on your suffering and what you're not getting. Try flipping your perspective and focusing on one thing that matters to you, that you do enjoy and that you do get to have. Shift your attention from what you're missing to what you have.

8. Find ways to change the situation. When you feel like a victim, you convince yourself that you can't change your circumstances. But that's almost never true. Get busy with how you can try to improve the situation, even if it feels impossible.

9. Practice empathic listening. When listening to other people, try listening with the intention of feeling what they're saying from their hearts. Stop focusing on what you need to do about what they're saying, what you think about it, or anything else that has to do with you. Listen as if you were "all ears," without the rest of you getting in the way.

10. Practice forgiveness. When you play the role of a victim, you're deciding to hold onto bitterness and anger; the certainty that you've been wronged—regardless of what the other's intention may have been. Instead of poisoning your own experience with resentful thoughts, try practicing compassion and understanding the other person involved. Start a new habit—make dropping resentment and trying out forgiveness a daily practice.

It's no fun to live as a victim or with a victim. The good news is that with awareness, a desire to change, and new habits, you can outgrow the victim mentality. A life lived with gratitude and kindness is far better than a life lived with resentment and bitterness at the short end of God's stick. How the universe and other people feel about you is, in fact, for you to choose.

Nancy Colier is a psychotherapist, interfaith minister, author, public speaker, workshop leader, and author of several books on mindfulness and personal growth. She is available for individual psychotherapy, mindfulness training, spiritual counseling, public speaking, and workshops, and also works with clients via Skype around the world. For more information, visit NancyColier.com

WISE HABITS

Move Toward Your Resistance

Your growth lies in that place you most fear to go

ANATOLY_GLEB/SHUTTERSTOCK



LEO BABAUTA

Our minds have the tendency to turn away and move away from what we most fear and resist. We naturally don't like pain, frustration, and difficulty, so avoiding them is an act of self-protection, in a sense.

And yet, this keeps us in our comfort zone. The path of growth is in those uncomfortable areas we're avoiding.

Each day, find the thing you're resisting the most and move toward it.

I don't mean that you should do something unsafe. Jumping off a cliff to your death isn't an example of moving toward your resistance.

I'm inviting you to find the thing in your business or personal life that you know would be powerful for you, but that you resist doing. Move toward that.

Turn toward it and look it in the face. Move closer to the fear or discomfort, and let yourself feel it completely. Open your heart to it.

Let your love melt the resistance a little. Stay in it even if it doesn't evaporate. Be courageous and fearless with it.

Do the thing you're resisting the most. Do it bolder and louder than you are comfortable with. Do it with love, from a place of love. Do it long enough that you are no longer held back by it, and your relationship to it is transformed.

Find the joy and beauty in the middle of

the resistance. Find gratitude in the midst of your fear. Find play in the midst of your burden.

You only need to focus on one small moment of it at a time, instead of the whole huge burden of it. You only need to open your heart for a moment. And then another, and another, but you don't need to worry about all those others right now. Just this one moment.

Each day, find the thing you're resisting the most and move toward it.

Move closer to your resistance, open your heart to it, do it repeatedly, and see what happens. That's my invitation to you.

If you want some support in that effort, join my Fearless Training Program and practice with me and others.

Leo Babauta is the author of six books; the writer of "Zen Habits," a blog with more than 2 million subscribers; and the creator of several online programs to help you master your habits. Visit ZenHabits.net



For every person who dies of COVID-19, nine close family members are affected.

Bereaved Families Are ‘Secondary Victims of COVID-19’

Losing jobs, routines, and social interaction compound grief in a significant way, warn experts

JUDITH GRAHAM

Every day, the nation is reminded of COVID-19's ongoing impact as new death counts are published. What is not well documented is the toll on family members.

New research suggests the damage is enormous. For every person who dies of COVID-19, nine close family members are affected, researchers estimate based on complex demographic calculations and data about the novel coronavirus.

Many survivors will be shaken by the circumstances under which loved ones pass away—rapid declines, sudden deaths, and an inability to be there at the end. Worrisome ripple effects may linger for years, researchers warn.

If 190,000 Americans die from COVID-19 complications by the end of August, as some models suggest, 1.7 million Americans will be grieving close family members, according to the study. Most likely to die are grandparents, followed by parents, siblings, spouses, and children.

“There’s a narrative out there that COVID-19 affects mostly older adults,” said Ashton Verdery, a co-author of the study and a professor of sociology and demography at Pennsylvania State University. “Our results highlight that these are not completely socially isolated people that no one cares about. They are integrally connected with their families, and their deaths will have a broad reach.”

Because of family structures, black families will lose slightly more close family members than white families, aggravating the pandemic's disproportionate impact on African American communities. (Verdery's previous research modeled kinship structures for the U.S. population, dating to 1880 and extending to 2060.)

The potential consequences of these losses are deeply concerning, with many families losing important sources of financial, social, and caregiving support.

“The vast scale of COVID-19 bereavement has the potential to lower edu-

cational achievement among youth, disrupt marriages, and lead to poorer physical and mental health across all age groups,” Verdery and his co-authors observe in their paper.

Holly Prigerson, co-director of the Center for Research on End-of-Life Care at Weill Cornell Medicine in New York City, sounds a similar alarm, especially about the psychological impact of the pandemic, in a new paper on bereavement.

“Bereaved individuals have become the secondary victims of COVID-19, reporting severe symptoms of traumatic stress, including helplessness, horror, anxiety, sadness, anger, guilt, and regret, all of which magnify their grief,” she and co-authors from Memorial Sloan Kettering Cancer Center in New York noted.

In a phone conversation, Prigerson predicted that people experiencing bereavement will suffer worse outcomes because of lockdowns and social isolation during the pandemic. She warned that older adults are especially vulnerable.

“Not being there in a loved one's time of need, not being able to communicate with family members in a natural way, not being able to say goodbye, not participating in normal rituals—all this makes bereavement more difficult and prolonged grief disorder and post-traumatic stress more likely,” she noted.

Organizations that offer bereavement care are seeing this unfold as they expand services to meet escalating needs. Typically, 5 percent to 10 percent of bereaved family members have a “trauma response,” but that has “increased exponentially—approaching the 40 percent range—because we’re living in a crisis,” said Yelena Zatulovsky, vice president of patient experience at Seasons Hospice & Palliative Care, the nation's fifth-largest hospice provider.

Since March, Seasons has doubled the number of grief support groups it offers to 29, hosted on virtual platforms, most of them weekly. All are free and open to community members, not just families whose loved ones received care from Seasons. (To find a virtual group in your time zone, call 1-855-812-1136, Season's 24/7 call center.)

“We’re noticing that grief reactions are far more intense and challenging,” Zatulovsky said, noting that requests for individual and family counseling have also risen.

Medicare requires hospices to offer bereavement services to family members for up to 13 months after a client's death.

Many hospices expanded these services to community members before the pandemic, and Edo Banach, president and CEO of the National Hospice and Palliative Care Organization, hopes that trend continues.

“It’s not just the people who die on hospice and their families who need bereavement support at this time; it’s entire communities,” he said. “We have a responsibility to do even more than what we normally do.”

In New York City, the center of the pandemic in its early months, the Jewish Board is training school administrators, teachers, counselors, and other clinicians to recognize signs of grief and bereavement and provide assistance. The health and human services organization serves New Yorkers regardless of religious affiliation.

“The vast scale of COVID-19 bereavement has the potential to lower educational achievement among youth, disrupt marriages, and lead to poorer physical and mental health across all age groups.”

Ashton Verdery and his co-authors observe in their paper

“There is a collective grief experience that we are all experiencing, and we’re seeing the need go through the roof,” said Marilyn Jacob, a senior director who oversees the organization's bereavement services, which now includes two support groups for people who have lost someone to COVID-19.

“There’s so much loss now, on so many different levels, that even very seasoned therapists are saying, ‘I don’t really know how to do this,’” Jacob said. In addition to losing family members, people are losing jobs, friends, routines, social interactions, and a sense of normalcy and safety.

For many people, these losses are sudden and unexpected, which can complicate grief, said Patti Anewalt, director of Pathways Center for Grief & Loss in Lancaster, Pennsylvania, affiliated with

the state’s largest not-for-profit hospice. The center recently created a four-week group on sudden loss to address its unique challenges.

The day before Julie Cheng's 88-year-old mother was rushed to the hospital in early July, she had been singing songs with Cheng's sister over the phone at her Irvine, California, nursing home. The next morning, a nurse reported that the older woman had a fever and was wheezing badly. At the hospital, COVID-19 was diagnosed and convalescent plasma therapy tried. Within two weeks, after suffering a series of strokes, Cheng's mother died.

Since then, Cheng has mentally replayed the family's decision not to take her mother out of the nursing home and to refuse mechanical ventilation at the hospital—something she was sure her mother would not have wanted.

“There have been a lot of ‘what ifs’ and some anger. Someone or something needs to be blamed for what happened,” she said, describing mixed emotions that followed her mother's death.

But acceptance has sprung from religious conviction. “Mostly, because of our faith in Jesus, we believe that God was ready to take her and she’s in a much better place now.”

Coping with grief, especially when it is complicated by social isolation and trauma, takes time. If you are looking for help, call a local hospice's bereavement department and ask what kind of services it provides to people in the community. Funeral directors should also have a list of counselors and grief support programs. One option is GriefShare, offered by churches across the country.

Many experts believe the need for these kinds of services will expand exponentially as more family members emerge from pandemic-caused shock and denial.

“I firmly believe we’re still at the tip of the iceberg, in terms of the help people need, and we won’t understand the full scope of that for another 6 to 9 months,” said Diane Snyder-Cowan, leader of the bereavement professionals steering committee of the National Council of Hospice and Palliative Professionals.

Judith Graham is a contributing columnist for Kaiser Health News, which originally published this article. KHN's coverage of these topics is supported by The John A. Hartford Foundation, Gordon and Betty Moore Foundation, and The SCAN Foundation.

Here’s Why We Crave Food Even When We’re Not Hungry

Complex brain-body signals work against our waistline when it comes to cravings for foods high in fat and sugar

CHARLOTTE HARDMAN & CARL ROBERTS

Food cravings are very familiar to most people. We may see or smell food and want to eat, or sometimes we suddenly feel like eating something delicious. These intense desires occur even when we’re not hungry, and they can be very difficult to resist.

There are many reasons why we may “feel” hungry even if our stomachs aren’t growling. Physical hunger in our bodies is controlled by complex physiological signals which stimulate our appetite and then suppress it after we’ve eaten (known as satiety). However, eating is much more than just responding to a biological need.

There’s another system that drives and motivates us to consume foods that are rich in energy (calories): the brain’s “food reward” system. The rewarding nature of food can easily override our satiety signals and seriously undermine our ability to resist temptation.

Eating delicious foods is inherently pleasurable. This anticipated enjoyment stimulates our “appetite.” The sight and smell of food attract our attention, and we may start to think about how nice it would be to eat. This can stir cravings and unnecessary eating.

Research has even shown that junk foods such as chocolate, ice cream, chips, and cookies, are especially hard to resist. These types of food are high in fat and/or sugar, which makes them highly appetizing and therefore desirable.

Food reward is underpinned by complex brain biology, including the endogenous opioid system and the endo-cannabinoid system, both of which have roles in the “liking” and “wanting” of food (such as the enjoyment of eating, and the motivation to attain food). The nucleus accumbens (an area of the brain that controls motivation and reward) contains overlapping opioid and cannabinoid receptor sites, which, when stimulated, produce powerful effects on desire, craving, and food enjoyment.

In some people, these systems may be more active than in other people, and so their motivation to eat is incredibly powerful. For example, brain imaging studies have shown that in people who habitually crave chocolate, there is greater activity in brain-reward regions when presented with the sight and taste of chocolate, compared to people who aren’t chocolate cravers. These individual differences are likely due to a combination of genetic and learned factors which have yet to be fully understood.

The reward system also enables us to form associations between being in certain situations and eating high-calorie foods, such as wanting fish and chips when we’re at the seaside or popcorn at the cinema. An interesting study found that people could easily learn such associations when they were given a milkshake while being shown images on a computer screen. The participants reported greater desire for a milkshake when they were shown these images compared to when they were shown images that were not associated with the milkshake.

The food reward system is highly efficient at directing us toward food sources and encouraging us to eat. Because of this, it can easily override satiety signals that tell us we’re full or not hungry. This system is highly advantageous in hunter-gatherer societies that need to rapidly detect food sources and consume high quantities of energy-rich foods

when available. In the past, this opportunistic over-consumption would have protected us against future periods of famine and ensured our survival.

However, in modern society, our natural motivation to seek out high-energy foods puts us at risk of weight gain. Modern dietary environments have been called “obesogenic” due to the abundance of high-calorie foods, which are often low-cost and served in large portions. Maintaining healthy eating behaviors in this environment is incredibly difficult and requires constant exertion.

The rewarding nature of food can easily override our satiety signals and seriously undermine our ability to resist temptation.

Food Cravings

First, it’s important to understand that there are powerful biological and psychological forces that motivate us toward food, and they’re constantly operating in an obesogenic environment. There’s nothing morally inferior about giving in to food cravings. Blame and stigma around eating and weight are known to be highly detrimental and need to be eradicated. However, there are ways that we can bring our cravings under control.

People often go on restrictive diets as a way of managing their eating and weight. However, dieting can paradoxically make food cravings worse. In one study, dieters experienced strong cravings for the very foods they were trying to restrict. Avoidance can make problematic foods even more prominent in our minds, and once we start thinking about these foods, it increases desire and cravings.

So, setting realistic eating and weight management goals is likely to be a better approach. Achieving goals increases belief in our ability to succeed as well as improving mood, which in turn can help us stick to healthier eating patterns. By contrast, setting unrealistic goals has the opposite effect.

It’s also important to identify and manage tempting situations. For example, avoiding the confectionery aisle in the supermarket altogether may help to prevent cravings and curb impulse buys.

Many people also experience cravings and desire to eat in response to mood. Therefore, trying to develop alternative coping strategies that don’t involve food and drink (such as going for a walk) can be helpful.

Finally, distinguishing between physical hunger signals and cravings may also help with the control of food intake. “Mindful eating” involves paying attention to hunger and satiety signals, and has been shown to be an effective weight-loss strategy.

We all can, and should be able to, enjoy eating nice-tasting foods. It’s just important to listen to our body’s satiety signals so we don’t go overboard.

Charlotte Hardman is a senior lecturer in psychology of appetite and obesity at the University of Liverpool in England, and Carl Roberts is a tenure track research fellow at the University of Liverpool. This article was first published on *The Conversation*.



Can Collagen Keep You Young?

While the volume of research is slight, the results are promising

DEVON ANDRE

These days, collagen has become a highly touted superfood. People are putting collagen supplement in their morning shakes and coffees, while others are making bone broth to eat it in soups. Its potential benefits are all aimed at helping people look and feel younger.

Collagen is essentially the glue that holds your body’s tissue together. It is a group of fibrous structural proteins found in skin, tendons, bones, and more. Some claim it can make skin younger and healthier, strengthen joints, nails, and even muscle.

But how accurate are these claims? Is collagen a superfood where a few small studies have been blown way out of proportion?

At this point, it really is too early to tell.

Like any other animal protein, collagen is essentially a collection of amino acids. When you eat it, your body breaks it down and digests it as it does anything else. The amino acids are broken down and delivered to your body to meet its various demands.

When you eat collagen, it’s not like it just goes directly to the areas that need it. It’s not transported wholly to your knee to help with joint pain or your skin to relieve wrinkles and improve elasticity.

But that doesn’t mean collagen can’t help with specific issues. There is plenty of anecdotal evidence and some scientific research to suggest it can promote youthfulness. Some work shows it can benefit joint health to improve mobility, help with skincare, and fight back against muscle loss.

Collagen is an excellent protein source that can boost the overall presence of certain amino acids in the body. This greater availability may lead to increased collagen production in the areas where you might need it most.

Thus far, there is not a robust amount of research to clearly state benefits. But there is some promise. Work in the past six years or so has found that collagen may:

- slow muscle loss and accentuate fat loss in older men (who were also lifting weights three times per month.)
- improve skin elasticity in middle-aged women.
- speed up wound healing in long-term care residents.
- improve symptoms of osteoarthritis and relieve overall joint pain.

These findings, however, are slim. There is still far more work to be done to substantiate the effects of dietary collagen.

If you’re interested in the potential age-defying benefits of collagen, talk to your physician. When buying a supplement, perform due diligence. Look for one that’s third-party tested by the NSF or USP, and carefully follow dosing directions.

Devon Andre holds a bachelor's degree in forensic science from the University of Windsor in Canada and a Juris Doctor degree from the University of Pittsburgh. Andre is a journalist for *BelMarraHealth*, which first published this article.



Collagen is a group of fibrous structural proteins found in skin, tendons, and bones.

The Effects of Sunlight on Human Immunity

Researchers continue to unravel the sweeping and essential impacts sunlight has on our ability to fight disease

Many believe that sunlight exposure has mainly harmful effects, yet recent evidence suggests that sunlight can improve immune function in multiple ways.

Beyond sunlight's ability to help your skin generate vitamin D, which lets your body modulate the innate and adaptive immune responses, researchers have demonstrated that sunlight can improve the motility of infection-fighting immune cells and discourage the spread of pathogens in hospital environments.

Recent studies have indicated that sunlight exposure may have immunomodulatory effects and protect against infections, including acute respiratory infections such as influenza.

Additionally, studies have shown that high levels of solar ultraviolet radiation (UVR) exposure are associated with lowered rates of allergies, autoimmune diseases, and cancers. While these results are often attributed to increases in vitamin D, researchers have now demonstrated that sunlight exposure can improve immune function by improving the motility of killer T-cells.

In addition to these findings, researchers also point out that infectious outbreaks, including influenza, tend to happen more often during winter months when many people have little to no sunlight and UVR exposure.

We have an innate and essential connection to sunlight that scientists are only beginning to understand in the modern terms of the human immune system.

Sunlight exposure can improve immune function by improving the motility of killer T-cells.



Additional research from Columbia University suggests that UV light can kill even drug-resistant bacteria without inducing skin damage. Researchers believe there are two main facets that explain sunlight exposure's effect on immune function: an increase in vitamin D levels and energized T-cells.

Increased Levels of Vitamin D Sunlight exposure is widely known to increase vitamin D levels in your body. Skin

cells absorb UVB radiation during skin exposure and convert it to vitamin D, which is metabolized in your liver and kidneys and used throughout your body to regulate calcium, increase beta-endorphins, and stimulate the immune system.

A deficiency of this important vitamin is linked to an increased risk of cancer, heart disease, obesity, depression, cognitive impairment, and bacterial and viral infections. Unlike other essential vitamins,

since vitamin D is synthesized in your skin following UVB exposure, sunlight exposure is vital for improving vitamin D levels and subsequently improving immune function. If regular sunlight exposure isn't possible due to your climate or lifestyle, vitamin D supplementation may be useful.

Energization of Infection-Fighting T-Cells

Sunlight, particularly blue light and UV light contained in solar rays, energizes T-cells by triggering the production of hydrogen peroxide in these cells, which enhances their motility in the skin and improves their infection-fighting capabilities.

Researchers theorize that the photosensitivity of T-cells may help to explain sunlight's positive effect on immune function and suggest blue-light therapy as a possible therapy for immuno-compromised patients.

In addition to these immune-boosting effects, researchers have found that sunlight may reduce the risk of infection in health care environments, as the majority of airborne microbes that cause infection cannot tolerate sunlight and are especially susceptible to direct (rather than diffused) sunlight.

Sunlight helps to regulate biological rhythms, which researchers believe may enhance immune function. Additionally, they suggest that hospitals and health care facilities be designed to allow sunlight to reach occupants, as even sunlight through glass may discourage the survival and spread of pathogens.

Additional Benefits of Sunlight Exposure

Sunlight's role helping the body produce vitamin D is critical because high levels of vitamin D have been found to improve inflammatory response, lower blood pressure, increase cognitive function, and lower the risk for certain cancers. Researchers estimate that sunlight exposure accounts for 90 percent of most individual's vitamin D levels, so if you're not getting much sunlight exposure, you're likely deficient. Sunlight has other impacts as well.

Skin Disorders

Various skin disorders, including eczema, psoriasis, acne, and pityriasis rosea, improve through regular sunlight exposure.

Melatonin Production

Sun exposure improves melatonin production, a pineal hormone responsible for trig-

gering your body's circadian rhythms and improving the quality of sleep. Melatonin also plays a key role in inflammation and infection and suppresses UVR-induced skin damage.

Weight Loss

Animal studies have found that ongoing, low-level exposure to UV radiation can reduce weight gain and improve cardiovascular health in subjects fed a high-fat diet, perhaps by reducing certain aspects of metabolic dysfunction.

Provides Emotional Health Benefits

Ongoing, low-level exposure to sunlight is associated with improved mental health. In various studies, participants with depression and seasonal affective disorder experienced improved moods after sunlight therapy. Additionally, researchers have demonstrated that increased levels of vitamin D can improve depression and other mental disorders.

Improves Cognitive Function

Recent studies have found a correlation between high levels of vitamin D and improved cognitive function.

Additionally, researchers have demonstrated that long-term, high levels of sun exposure are associated with better cognitive functioning, possibly because of the protective effect vitamin D has on brain cells and an increased production of serotonin and melatonin and improved circadian rhythms.

The potential for sunlight exposure therapy is vast, and it's an affordable, natural, and easily attainable way to improve immune function while boasting a wide range of additional benefits. To learn more about sunlight exposure's researched effects on cancer, psoriasis, cardiovascular disease, prenatal nutrition, mental disorders, skin care, and more, please visit the sunlight exposure research database at GreenMed-Info.com

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as they won't negatively affect blood sugar levels the way artificial sweeteners can.

Smoothies are another sweet drink and often a great way to get the nutrients we need on a daily basis. But many commercially available smoothies contain a large amount of sugar because it's either added to the smoothie itself through the base that's used, or a fruit syrup is used instead of fresh fruit. I love making my own smoothies in my blender and I throw in whatever I have in the fridge: fruits, veggies, protein powder, and nuts.

To keep the sugar content down, you can use water as the base, or unsweetened plant-based milk.

The issue with low-fat or fat-free foods is that in many cases, the fat is replaced with sugar and processed carbohydrates.

Packaged Snacks

When it comes to snacking, no matter what the picture on the box, be sure to read the ingredients to see if they have any preservatives, artificial colors, or flavors, and to determine how healthy they are.

Generally speaking, any processed snack food is going to be high in calories and low in nutrients. Even the healthiest processed snack foods don't measure up to real fruits and vegetables.

For example, my daughter loves vegetable chips—they're crunchy and the ingredients are pretty clean, but it's important to note that they don't have enough vegetables to replace any of the 5 to 10 servings a day required for a healthy diet.

Trail mix can be the exception, because it is often just dried fruit and nuts. But some brands of trail mix also contain food coloring and sulfites, so while they may have healthy ingredients, they are contaminated, so to speak. The good thing about trail mix is it's easy to make your-

self. Mix together pumpkin and sunflower seeds, nuts, dried fruit, and whatever else you have in your cupboard.

Loofah Sponges

If you like to use a loofah in the shower, did you know that dirt and skin cells can get trapped inside it? It's really important to allow the loofah to dry properly after each use—otherwise, you're putting the dirt and bacteria back on your body. You can dry it outside of the shower, and replace it if it smells or changes color. Dry brushing is also very effective for removing dirt and dead skin cells. Rinse your dry brush and allow it to dry.

Dental Care

Of course, it's important to brush your teeth after you eat, but if you brush too soon after eating, it could have a negative effect on your enamel, especially if you've eaten acidic foods. Ideally, you want to wait 30 to 60 minutes after eating. You can drink water or chew natural gum with xylitol while you're waiting. This can help clean your teeth before you brush them and xylitol has been shown to inhibit the growth of the bacteria that cause cavities.

And finally, many of us keep our toothbrushes on the counter in the bathroom. If you do that, make sure it's nowhere near your toilet, because when we flush with the lid up, it releases an aerosol plume that contains bacteria and floats in the air for up to two hours.

That plume contains bacteria that can land on your toothbrush. Ewww.

Bottom Line

Be sure to read labels and steer clear of ingredients that can masquerade as "healthy." And mind personal habits that can become unhealthy if you aren't careful.

Andrea Donsky is an author, registered holistic nutritionist, editor-in-chief of NaturallySavvy.com, and co-founder of TheHealthyShopper.com. This article was first published on NaturallySavvy.com—a recipient of [Healthline's Best Healthy Living Blogs](http://Healthline'sBestHealthyLivingBlogs) for 2019.

Can Blood Sugar Control Protect Against COVID's Worst Effects?

New protocol may protect health care workers, improve outcomes for those infected with COVID-19, researchers say

JORDYN IMHOFF

A new protocol for monitoring glucose may help combat serious complications from COVID-19 in patients with diabetes or high blood sugar, researchers say.

After preliminary observations of 200 COVID-19 patients with severe hyperglycemia, a new paper in the American Diabetes Association journal *Diabetes* sheds light on why high blood sugar may trigger worse outcomes in people infected with the virus.

The researchers have also developed a blood sugar management tool that may potentially reduce the risk of secondary infections, kidney issues, and intensive care stays in people with diabetes, pre-diabetes, or obesity, who get COVID-19.

"Based on preliminary observations of our patients, those with one of these preexisting conditions are at high risk for making the virus-induced respiratory dysfunction much worse, potentially resulting in death," said first author Roma Gianchandani, a professor of internal medicine in the Michigan Medicine Division of metabolism, endocrinology, and diabetes.

It's the low-grade, inflammatory nature of diabetes that promotes the virus' inflammatory surge, resulting in insulin resistance and severe hyperglycemia.

COVID-19 and Diabetes

Senior author Rodica Pop-Busui, a diabetes specialist, professor of internal medicine, and vice-chair of clinical research in the internal medicine department, suspects it's the low-grade, inflammatory nature of diabetes that promotes the virus' inflammatory surge, resulting in insulin resistance and severe hyperglycemia.

"When the body becomes this inflamed, it triggers an abnormal immune response that instead of just attacking the virus, affects the rest of the body's healthy cells and tissue, leading to rapid deterioration in health," she said.

Specifically, these patients are at an increased risk for mechanical ventilation, kidney replacement therapy due to kidney failure, and requiring medications known as vasopressors to stop dangerously low blood pressure, or steroids to combat acute respiratory distress syndrome.

Gianchandani said these complications make managing blood sugar more difficult. "Our team is convinced this management is essential to prevent complications that lead to prolonged inpatient stays, or morbidity," she said.

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"A recent study has already shown there's a correlation between well-controlled blood sugar and lower levels of inflammatory markers."

The research team developed a tool to identify and manage high blood sugar in COVID-19 patients, placing them into certain risk categories that looked at hyperglycemia severity, presence of obesity, level of insulin resistance, the extent of kidney dysfunction, and evidence of rapid changes in inflammatory markers.

Protocol for Blood Sugar Monitoring

The newly created hyperglycemia management teams set out to find a way to monitor patients' diabetes without having to use more personal protective equipment to visit the rooms all the time. It was also important to reduce the health care provider's exposure to the virus as much as possible.

Although typically accurate, a continuous glucose monitor wouldn't be as helpful because a patient's low blood pressure and the use of blood pressure medications could falsely elevate blood sugar levels.

The new protocol called for insulin delivery every six hours, and at the same time, a nurse would check in on the patient. Some patients who were on ventilators or receiving high doses of vitamin C would have their arterial or venous blood sugar levels checked, replacing the need for the team's blood sugar check.

For patients with the highest blood sugar levels and severe hyperglycemia, insulin infusions were an option for them until their levels fell to within a normal range.

The result of these efforts helped successfully lower blood sugar levels without increasing nurse contact or the overall burden on primary care teams and PPE usage.

"Improving blood sugar control was important in reducing the amount of secondary infections and kidney issues this cohort of patients are susceptible to," Gianchandani said. "This might help shorten ICU stays and lessen the amount of patients that need a ventilator."

It's important to note that this protocol wasn't developed as a result of a clinical trial but is based solely on preliminary observations in the patients the team followed. A larger, randomized, and controlled study is necessary to determine how this protocol impacts mortality, time to recovery, the length of ICU stays, and the rate of severe complications.

"Our team is looking forward to the next steps in confirming our hypothesis," Gianchandani said. "In the meantime, I think these observations validate the importance of blood sugar management in COVID-19 patients and can serve as a guide or inspiration for other institutions."



Those at greatest risk of dying from COVID-19 often have multiple ailments that complicate treatment, but a new treatment protocol may help resolve that.

ALL PHOTOS BY SHUTTERSTOCK



Homemade salad dressing is easy to make and vastly healthier than most store-bought varieties.



It's really important to allow the loofah to dry properly after each use—otherwise, you're putting the dirt and bacteria back on your body.

Things You Think Are Healthy but Aren't

Don't be duped by misleading package labels, empty calorie counts

ANDREA DONSKY

Some of us try to do the right thing when it comes to being healthy: We exercise, eat right and try to make healthy choices—but are we being sabotaged in unexpected places?

Salad Dressings

When it comes to products—especially food and beverages—product labels and marketing play a huge role in how healthy we think they are.

For example, let's look at store-bought salad dressings. Some will put a healthy ingredient such as olive oil on the front label, which makes us think it's really healthy because olive oil is a premium ingredient. But when you look at the ingredients list on the label, you see it also has canola oil, sugar, and other preservatives—often higher on the list—that make it not so healthy.

When buying store-bought dressing, look for brands that are clean, use only olive or avocado oil, and don't have any added sugars or unnecessary preservatives.

Or alternatively, you can easily make your own salad dressing. I make a delicious dressing using only four ingredients: olive oil, lemon juice, garlic, and a pinch of salt. You can even swap the lemon juice for apple cider vinegar or balsamic if you prefer the taste.

Yogurt

Often, yogurt is labeled as being fat-free. That presents two problems. The first is the implicit suggestion that fat is bad. Fat can be healthy, but we tend to eat

Many commercially available smoothies contain a large amount of sugar because it's either added to the smoothie itself through the base that's used, or a fruit syrup is used instead of fresh fruit.

too much of it. That said, we do actually need it. Our brain is made up of 60 percent fat, so you want to eat good quality fats such as olive and avocado oil as well as omega-3s, such as fish oil, to help reduce inflammation in our body and improve brain function.

The issue with low-fat or fat-free foods is that in many cases, the fat is replaced with sugar and processed carbohydrates—which can raise blood sugar levels and leave us feeling hungry. Fat also helps us feel full after eating it.

When it comes to yogurt or dairy products in general, we do want to be mindful of eating too much fat because it's mostly saturated fat, as opposed to monounsaturated or polyunsaturated fats like olive oil and omega-3s. That's where moderation comes in. If you eat dairy, read the labels to make sure you're getting no more than 2 or 3 grams of saturated fat per serving.

Zero-Calorie or Diet Drinks

If you want a zero-calorie drink, nothing beats water. Make sure to drink at least half an ounce of water for every pound you weigh—every day—to stay properly hydrated.

But if you equate zero-calorie drinks to diet soda and similar drinks, be warned. Diet beverages generally use artificial sweeteners instead of sugar to sweeten them. When we drink them, they trick our brain into thinking it's getting glucose. But when it doesn't, research finds we end up reaching for sweeter foods later on.

If you're looking for low-calorie sweet beverages, make your own iced tea with a little xylitol, stevia, monk fruit, or erythritol

TRADITIONAL CHINESE MEDICINE

Why Getting Dirty Is Good for Your Health



HEIDI BRAND/SHUTTERSTOCK

Our well-being depends on microbes we pick up and grow immunity with as children

LYNN JAFFEE

When I think of my childhood, I think first of all the hours I spent playing in the dirt. There was nothing better than upending rocks to look for salamanders, wading into skanky ponds with the hope of nabbing a turtle, or crouching at creek's edge catching minnows. I spent hours on end fascinated and grimy.

While my parents might not have loved how dirty I became (I could leave an impressive bathtub ring), my time rooting around in the dirt may have been good for my health. Your well-being is connected to the microbes you carry on and in your body, and the greater variety that you are exposed to, especially as a child, the better the odds that you will be healthy as an adult.

Your body is host to billions of microbes that live not only on your skin, but also in your mouth, gut, nose, and pretty much everywhere else. These microbes form colonies called microbiota, a topic that scientists are only now beginning to understand. What they do know, however, is that human life needs these "bugs" for our very survival.

At issue now, however, is that while I grew up in an environment where I

could explore these wild habitats, more and more kids today are raised in urban or suburban communities without exposure to a broad variety of microbes—essentially, to dirt—which helps us develop optimal immunity. Exposure to a lot of different bugs teaches our immune system to discern between the good, the bad, and the harmless. Scientists are finding that the result of this loss of exposure is an increased incidence of allergies, asthma, digestive problems, food sensitivities, and other immune-related illnesses.

Along this same line, in Chinese medicine, what doesn't make you sick makes you stronger. And what makes you sick according to this medicine includes a whole host of lifestyle factors, such as stress, overworking, and eating improperly. In Chinese medicine, parasites, unclean food, and pathogens like microbes, viruses, and bacteria may foretell an illness but are not the definitive cause.

According to Chinese medicine, you are able to resist many of these pathogens when your protective energy (called "wei qi") is strong. Much like immunity, when you are strong and healthy, your body can fight off invading illnesses. When you become run down or stressed, your energy takes a hit, your protective barrier becomes weak, and you get a cold, the flu, allergies, or some other illness.

This is why Chinese medicine, and

Childhood exposure to 'bugs' is key to a healthy microbiome.

other broad-minded forms of medicine, focus on strengthening individual immunity rather than simply attacking illness.

So, according to Chinese medicine, the

way to maintain your health and immunity is to maintain your energy. This means eating the right foods in the right amounts, getting enough sleep, balancing work with rest, managing your stress, and exercising moderately.

In addition, because much of Chinese medicine is based on patterns in nature, connecting with the natural world is a good way to not only enhance your spiritual health, but also to gain more exposure to the microbial world. Here are a few simple ways to do that—for you and the children in your life.

Go outside and play. Ideally in a park or in a wild space. Running, hiding, touching the ground, and getting dirty are good ways to get in touch with some bugs, big and small.

Pick fruit, especially in the wild. As a kid, we had blueberry bushes growing along our driveway. Filling up a bucket of blues involved contact with lots of wild things, even though it was in our front yard.

Grow a garden. Flowers or vegetables; either will get you and your kids in touch with the soil. The upside to growing vegetables is that you're also growing

MILAN W/SHUTTERSTOCK

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