

## Ode to E Pluribus Unum for Sunday July 27 2025



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### Painting with Jupiter



*Image Credit: NASA, JPL-Caltech, SwRI, MSSS; Processing: Rick Lundh*

In digital brush strokes, Jupiter's signature atmospheric bands and vortices were used to form this interplanetary post-impressionist work of art.

The creative image from citizen scientist Rick Lundh uses data from the Juno spacecraft's JunoCam. To paint on the digital canvas, a JunoCam image with contrasting light and dark tones was chosen for processing and an oil-painting software filter applied.

The image data was captured during perijove 10. That was Juno's December 16, 2017 close encounter with the solar system's ruling gas giant. At the time the spacecraft was cruising about 13,000 kilometers above northern Jovian cloud tops. Now in an extended mission, Juno has explored Jupiter and its moons since entering orbit around Jupiter in July of 2016.

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## Chords & Riffs

### Van Halen American Rock Group



*aidwiki.com*

The American heavy metal band was distinguished by the innovative electric-guitar playing of Eddie Van Halen. The group became one of the most successful metal acts to cross over into the mainstream in the 1980s. Among Van Halen's best-known songs are "Runnin' with the Devil," the megahit "Jump," and "Why Can't This Be Love."

Exposed to music early by their father, a jazz musician, and classically trained, brothers Eddie and Alex Van Halen turned to rock music soon after their family emigrated from the Netherlands to southern California in the 1960s. In time Eddie, a drummer, and Alex, a guitarist, switched instruments. In 1972 they formed a band that was initially called Genesis but was later renamed Mammoth. Charismatic, Indiana-born lead singer

David Lee Roth and bassist Michael Anthony from Chicago joined in 1974, and the band changed its name to Van Halen.

The group progressed from playing backyard parties and high-school gigs around Pasadena, California, to performing at nightclubs in Los Angeles, such as the Starwood, Gazzarri's, and the Whisky a Go Go.

Throughout the band's frequent lineup changes what endured was Eddie's virtuoso technique—notably his masterful use of the “whammy” (vibrato) bar and string bending and his adaptation of baroque music stylings—which influenced countless heavy metal guitarists in the 1980s. In 2007 Van Halen (including both Roth and Hagar) was inducted into the Rock and Roll Hall of Fame.

Eddie Van Halen died in 2020 after a long battle with throat cancer. His death effectively put an end to the band. In 2024 Alex Van Halen released the memoir *Brothers*, which looks back at the band's ups and downs and pays moving tribute to Eddie.

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Jump <https://youtu.be/SwYN7mTi6HM?list=RDSwYN7mTi6HM>

Eruption (Guitar Solo) <https://youtu.be/L9r-NxuYszg?list=RDL9r-NxuYszg>

Dreams (Blue Angels) <https://youtu.be/mGpMUYmqH2M?list=RDmGpMUYmqH2M>

Best Of Both Worlds <https://youtu.be/OYnIzlb1ysA?list=RDOYnIzlb1ysA>

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## GOOD EATS FROM THE ODE

### Peanut Soup

From Fred Wudl

#### Ingredients

1.5 Lb. raw peanuts  
1 tablespoon minced parsley  
3 yellow medium hot peppers  
1 spoonful salt  
3 Qt water 2 spoonful rice  
5 pieces of beef (stew beef)  
¼ cup peas or wet garbanzos  
1 spoonful of oil  
5 yellow potatoes peeled and halved

1 medium-sized onion  
1 teaspoon oregano  
1 small tomato  
½ jalapeño  
2 carrots in strips

First, we “wet” the peanuts in boiling water for 15 min, drain the water, peel the nuts and grind in a blender or processor.

In a pot with lukewarm water, place the meat and, as boiling is approaching, remove the foam, being careful not to remove the beef grease. In a pan brown the finely minced onion in the oil, then add the minced tomato, minced parsley, and salt. The whole is added to the boiling water together with the carrots and cook for ½ hr.

Add the peanuts and cook, being careful NOT to let the foam escape since it is another source of the soup’s good flavor.

After ½ hr, add the rice, 10 min later, add the peas and potato. Finally add the oregano, taste for salt and remove from heat.

For presentation, add finely chopped parsley. Salsa on the side.

*Fred points out, "I had to improvise because the Bolivian yellow potatoes are, not surprisingly, different and so is the "yellow medium spicy pepper".*

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## FLASHMOB CENTRAL

### Flash mob Carmina Burana

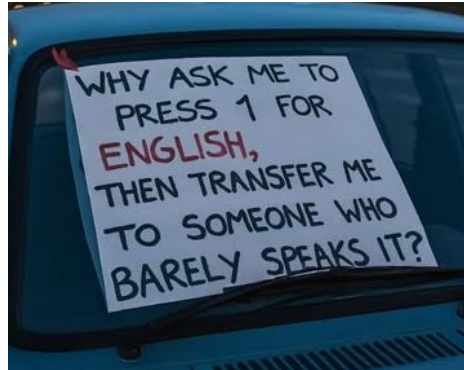


youtube

<https://youtu.be/PJNp5UKRtbQ?t=2>



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## Exercise Boosts Survival Rates in Colon Cancer Patients

*A three-year exercise program improved survival in colon cancer patients and kept disease at bay, a first-of-its-kind international experiment showed.*



*Terri Swain-Collins uses a treadmill in the care of physiotherapist Alison MacDonald on May 20, 2025, at Kingston Injury Management, a clinic in Kingston, Ontario, in Canada.  
(Lisa Callahan via AP)*

An aerobic exercise regimen can lower death rates from colon cancer and reduce recurrence rates by roughly one-third, a new study has found. The study is the first to show a causal relationship between cancer outcomes and

exercise.

Researchers tracked 889 colon cancer patients from 2009 to 2024 who had received chemotherapy. Roughly half were assigned readings on a healthy lifestyle, while the other half were assigned a personal coach. The coach met with patients every few weeks for three years, helping them establish and maintain an exercise regimen including walking, biking, kayaking, skiing, swimming, or running. They aimed for the equivalent of at least three 45- to 60-minute walks each week.

Eight years on, the intervention group saw a 28% reduction in cancer recurrence and 37% fewer deaths. The study is the first randomized controlled trial of its kind and strengthens the case for an exercise intervention as the standard of care.

<https://bit.ly/43IDUIn>

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## People Benefit from Medicine, but Machines Need Healthcare Too

*Intriguing similarities between how we monitor the health of machines and our own human bodies*



*Seeing inside Modern sensors can provide real-time digital data about the health of machines (left) and the human body (right).*

*(Courtesy left image: Shutterstock/scharfsinn; right image: Shutterstock/ra2 studio)*

AI is increasingly used in medical science – for example to predict a patient’s risk of heart attacks. Intriguing similarities between how we monitor the health of machines and the health of human bodies. Jet engines and hearts are very different objects, but in both cases monitoring devices gives us a set of digitized physical measurements.

Sensors installed on a machine provide various basic physical parameters, such as its temperature, pressure, flow rate or speed. More sophisticated devices can yield information about, say, its vibration, acoustic behaviour, or (for an engine) oil debris or quality. Bespoke sensors might even be added if an important or otherwise unchecked aspect of a machine’s performance needs to be monitored – provided the benefits of doing so outweigh the cost.

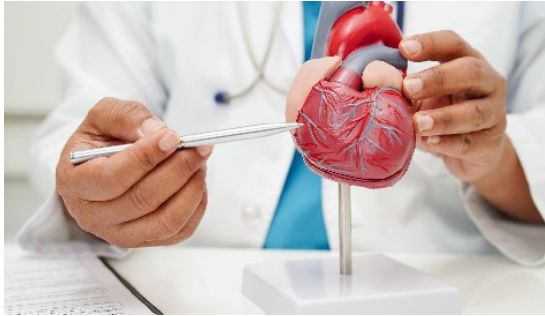
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## Heart Attack Deaths Have Dropped by Nearly 90% Since 1970



*manassanant pamai/ iStock*

Heart disease impacts millions of people every year in the U.S. But there's now some good news on that front: A Stanford study found that not only have heart disease-related deaths plummeted by 66% over five decades, but deaths from heart attacks specifically have decreased by nearly 90% — meaning the latter is no longer the leading cause of mortality in the country.

Using data on adults ages 25 and up from the National Vital Statistics System, researchers examined how these causes of death have changed over time. In addition to the previous figures, they learned that coronary artery disease mortality declined by 81%. "Overall, there's been significant progress with every decade," lead author Sara King said in a news release.

Touting it as a "medical miracle," senior author Latha Palaniappan credited the decrease in heart attack deaths to "the synergistic power of science, medicine, and public health." On the flip side, the team found that more Americans now die from chronic heart disease, likely in part because people are living to older ages. "We have so many tools in our toolbox now, but still, there's a lot more that can be developed and improved," said King. "I hope the numbers just keep getting better."

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## Watch the Top 8 Hummingbirds of the Panama Feeder Cam



*Snowy-bellied Hummingbird*  
by Yeray Seminario / Macaulay Library

Take a two-minute, tropical micro-vacation with this superclip from the Panama Hummingbird Feeder Cam. Get an up-close look at the most common species that have visited the feeder so far, from peppy plumeleteers to jockeying jacobins.

[Watch now.](#)

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## Malaysia Will Stop Accepting U.S. Plastic Waste



*Malaysia will ban plastic waste imports from the U.S. because of America's failure to abide by the Basel Convention treaty on international waste transfers, in a move that could have significant consequences for California.*

*A worker transports plastic waste slated for a compressor in Bentong, Malaysia, in June 2024 before the waste is recycled and sold.*  
(Mohd Rasfan / AFP/Getty Images))

Malaysia emerged as a major destination for U.S. waste after China banned American waste imports in 2018. California shipped 864 shipping containers, or more than 10



million pounds of plastic waste, to Malaysia in 2024, according to the Basel Action Network, an advocacy group. That was second only to Georgia among U.S. states.

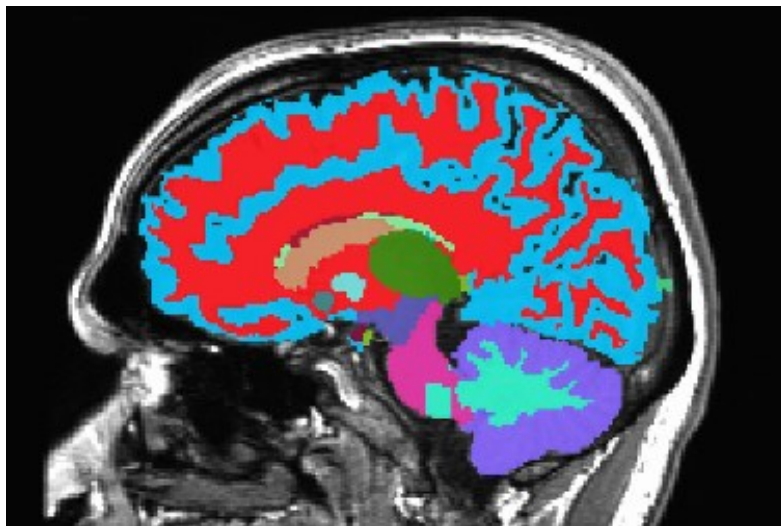
Under Malaysian waste guidelines announced in June, the country will no longer accept plastic waste and hazardous waste from nations that didn't ratify the Basel Convention, the international treaty designed to reduce the international movement of hazardous and other waste. The U.S. is one of just a handful of countries, including Fiji and Haiti, that hasn't signed the pact.

<https://bit.ly/3To5zcK>

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## Single Brain Scan Can Tell How Fast You're Aging

*New aging clock can predict risk for dementia, other age-related diseases years before symptoms appear*



*Imagine a tool to measure how fast you're aging — while you're still reasonably healthy. Now, a single brain scan may reveal your aging rate and risk of dementia and disability years into the future, and while you might still have a shot at improving your health.*

*Credit: Ethan Whitman*

Video

[https://youtu.be/Akc2\\_htaz7I](https://youtu.be/Akc2_htaz7I)

From a single MRI brain scan, the tool can estimate your risk in midlife for chronic diseases that typically emerge decades later. That information could help motivate lifestyle and dietary changes that improve health.

In older people, the tool can predict whether someone will develop dementia or other age-related diseases years before symptoms appear, when they might have a better shot at slowing the course of disease.

The results were [published](#) July 1 in the journal Nature Aging.

<https://bit.ly/40zMuZ1>

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## In-N-Out Burger Hitting the Highway

*Lynsi Snyder says her family will leave California along with the company's headquarters: 'Doing business is not easy here*



*In-N-Out's billionaire owner, Lynsi Snyder, said challenges running a business in California prompted her to relocate to Tennessee.*

*Leonard Ortiz/Digital First Media/Orange County Register via Getty; Adam Lau/AP; Shayanne Gal/Business Insider*

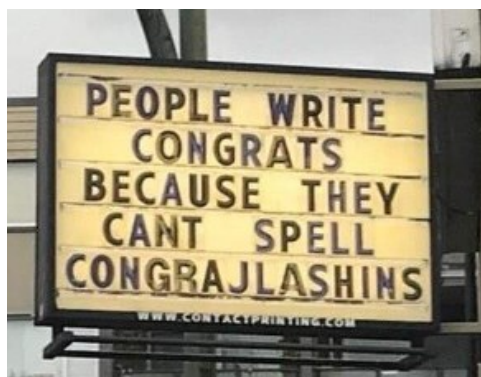
Speaking on the "Relatable" podcast released Friday, Snyder said she was moving to Tennessee as the cult burger chain plans its southeastern expansion and establishes a new headquarters in the suburbs outside Nashville.

"There's a lot of great things about California, but raising a family is not easy here. Doing business is not easy here," Snyder said.

In-N-Out is consolidating its corporate presence in California, centralizing its West Coast operations out of offices in Baldwin Park, where the chain was founded by Snyder's grandparents, and phasing out its Irvine headquarters by 2030. Its new Franklin, Tennessee headquarters is set to open in 2026.

*Will the last money making business to leave CA please turn out the lights/*

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## Do Aphrodisiacs Work? What the Science Says.

*Strawberries? Oysters? The perfect aphrodisiac remains elusive.*



*Beyond illegal drugs, the evidence behind aphrodisiacs is patchy.*

*Credit: DepositPhotos*

Aphrodisiacs are foodstuffs or other substances proposed to heighten our libido and improve our sexual enjoyment and performance. Named after the Greek goddess of love, Aphrodite, aphrodisiacs have been described, exalted, and ingested for thousands of years. Proposed aphrodisiacs include grocery store essentials, like strawberries, luxury options like raw oysters, and traditional extracts like yohimbine, derived from the bark of a West African evergreen.

This combination—dopamine to drive us to seek pleasurable behaviors, and opioids and endocannabinoids to make those behaviors feel good—appears to be a multifunctional brain mechanism that serves many external stimuli, says Berridge. “It seems there might be a common currency that generates all these different pleasures,” he adds.

<https://bit.ly/3G5CqQI>

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**Today a man knocked  
on my door and asked  
for a small donation  
towards the local  
swimming pool.  
I gave him a glass of  
water.**

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## Crows Count 'One, Two, Three' Out Loud



Carrion crows, like this one, know how many calls they've uttered.

Andreas Nieder

Carrion crows are known as "feathered apes" for a number of good reasons. And scientists just discovered another: They can count out loud, researchers reported yesterday in *Science*. The work suggests that the birds understand numbers and counting in the same way humans do, making them the only other species known to have this ability.

One hallmark of human language is our ability to associate and utter a sound, such as a word, with something we see or hear. We might say "three" if we see three apples, for example. Could crows do this as well? To find out, a team worked with three carrion crows trained to produce one to four calls (a kraak) when they saw an Arabic numeral on a screen or heard a short noise. In thousands of trials, the birds usually made the correct number of kraaks required by the visual cue, but often took longer to respond to cues requiring three or four calls.

John Marzluff, a wildlife scientist and crow expert who was not involved in the study, says that suggests the crows engage in the same kind of "mental planning" that humans do when asked a question requiring more than a one-word reply. "We now know that numerical competence, once considered a hallmark of human intelligence, isn't just a human trait," he adds.

<https://bit.ly/4m3grcc>

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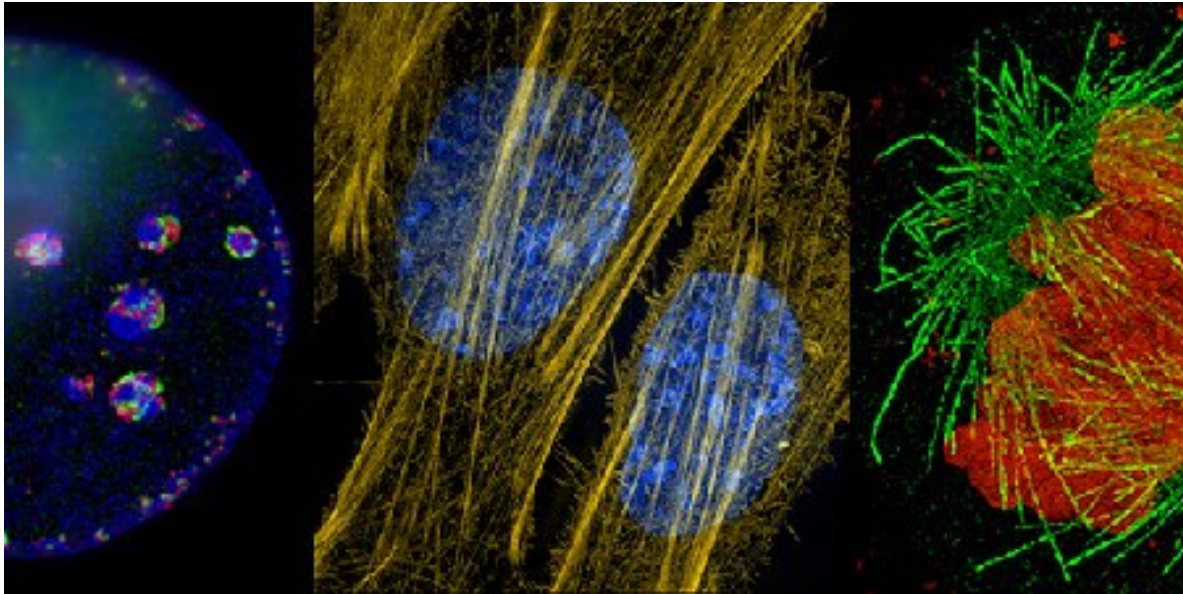
I'm watching this Show for like,  
10 minutes and the Lady is Listing  
all these really Great things to do.  
Then I realize it's the Religious Channel  
and she was listing Sins.

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## Super-Resolution Microscopes Showcase the Inner Lives of Cells

Advanced light microscopy techniques have come into their own — and are giving scientists a new understanding of human biology and what goes wrong



*Powerful microscopes are affording new views of cellular processes. These include details of DNA replication in the nucleus of a mouse cell shown at left; the cell's replication machinery appears green, already-replicated DNA is red and DNA bundled into chromatin is blue. At center, the cytoskeleton's actin fibers in mouse connective tissue cells are seen in yellow; cellular DNA is stained blue. Shown at right is a human cell dividing in two; its genetic material is labeled in red, and the spindle apparatus that pulls the sister chromatids apart is labeled in green.*

*Credit: Lothar Schermelleh*

Electron microscopy, which uses electron beams instead of light, offers higher resolution. But the resulting black-and-white images make it hard tell proteins apart, and the method only works on dead cells.

Now, however, optics engineers and physicists have developed sophisticated tricks to overcome the diffraction limit of light microscopes, opening up a new world of detail. These ["super-resolution" light microscopy techniques](https://bit.ly/44WplkZ) can distinguish objects down to 100 nanometers and sometimes even less than 10 nanometers. Scientists attach tiny, colored fluorescent tags to individual proteins or bits of DNA, often in living cells where they can watch them in action. As a result, they are now filling in key knowledge gaps about how cells work and what goes wrong in neurological diseases and cancers, or during viral infections.

<https://bit.ly/44WplkZ>

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## Houthi Challenge America's Fighter Jets

newswav.com



On April 16th, 2025, advanced carrier-based aircraft executed a precise overnight operation to neutralize a high-priority site identified as a strategic control center. This in-depth documentary follows every stage of the mission: from the deployment of specialized electronic support aircraft to the delivery of precision-guided systems by carrier air wing units, and the real-time

coordination enabled by state-of-the-art surveillance platforms.

Discover how expertly synchronized air, sea, and electronic assets overcame layered defenses while maintaining operational integrity and minimizing risks to crews and nearby infrastructure. Highlights include a breakdown of next-generation aviation technology, integrated maritime defense systems, and up-to-the-minute battle assessment techniques.

Through firsthand mission details and technical analysis, this video provides a unique look at how modern platforms and coordination ensure freedom of navigation and safeguard key transit routes.

Dive into the evolving role of advanced carrier groups and see how innovation in airborne support, stealth, and information-sharing is shaping future operations at sea.

<https://youtu.be/kXIE5nW73Pw>

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## Help, I Hoard Things:

*The science behind why we hold onto possessions and expert tips on letting them go*



Svetlana Malysheva/ iStock

It's natural to want to hold onto items that mean a lot to us, but unmanageable amounts of clutter can make our lives more difficult.

There are t reasons we tend to hold onto certain things: They may be useful in the future, have sentimental value, or contain important information. Another reason has to do with its perceived value. It's normal to feel discomfort when considering letting such items go.

After examining the relationship between participants and their possessions, a [study](https://bit.ly/3Trz51o) from the Journal of Consumer Psychology found that we may tie certain items to our self-worth, and also grieve for possessions that we link to our self-identity.

<https://bit.ly/3Trz51o>

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## Can Other Metals Be Turned into Gold?



*(OsakaWayne Studios/Getty Images)*

In pursuit of prestige and riches, wealthy people across medieval Europe worked in vain to transmute everyday metals into gold. Today, this process, known as [chrysopoeia](https://bit.ly/3ICqQ0j), is mostly dismissed as an alchemical dream. But is there any science to show that metals can be turned into gold?

In fact, there is — and all you need for the transmutation is enough energy to remove three protons from the lead nucleus.

<https://bit.ly/3ICqQ0j>

*What the heck. I'll supply some lead.*

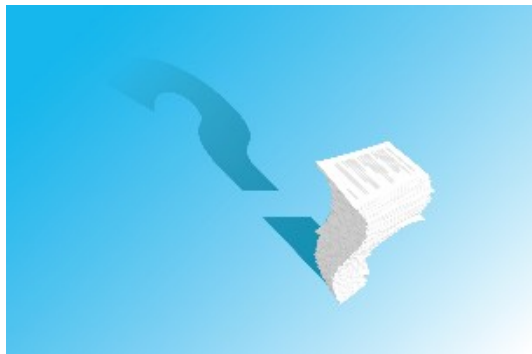
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## One in Six Scientific Papers Mischaracterize Work They Cite

*New study of long-standing problem takes novel approach, asking cited authors to evaluate accuracy*



*Block37/Istockphoto, Adapted By N. Jessup/Science*

In 1980, The New England Journal of Medicine (NEJM) published a five-sentence letter indicating the risk of opioid addiction was low when the drugs were prescribed for chronic pain. During the next 25 years, hundreds of scholarly articles cited the letter—in many cases overgeneralizing or omitting key details, potentially helping drive overprescription of opioids in the 1990s and contributing to the ensuing wave of overdose deaths, a 2017 analysis found.

The episode offers an extreme example of scholars incorrectly describing findings they cite. The problem can seem intractable: Commentaries identifying inaccuracies go back to at least 1985, yet remedies have proved elusive. Previous research into the prevalence of flawed citations has typically focused on a single discipline and has yielded a wide range of estimates, some as high as 40%. Now, a new study finds that [approximately one in six papers across the natural and life sciences mischaracterize](https://bit.ly/3IBcg98) the findings in a paper they cite—and offers ways to improve.

<https://bit.ly/3IBcg98>

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## Earth Is Going to Spin Much Faster Over the Next Few Months

*Differences in the gravitational pull between the Earth and the Moon will make July 9, July 22 and August 5 unusually short.*



*With the moon closer to the poles, the Earth's spin speeds up, making our day shorter than usual.*

*(Image credit: Francesco Carta fotografo/Getty Images)*

Earth is expected to spin more quickly in the coming weeks, making some of our days unusually short. On July 9, July 22 and Aug. 5, the position of the moon is expected to affect Earth's rotation so that each day is between 1.3 and 1.51 milliseconds shorter than normal.

A day on Earth is the length of time needed for our planet to fully rotate on its axis — approximately 86,400 seconds, or 24 hours. But Earth's rotation is affected by a number of things, including the positions of the sun and moon, changes to Earth's magnetic field, and the balance of mass on the planet.

<https://bit.ly/44hmfsK>

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## How Elephants Say They Like Them Apples

*Researchers found that the animals are capable of using their trunks to make a range of gestures that express their intentions and wants.*



*Vesta Eleuteri*

If you give an elephant an apple, she's going to want some more. But how can she get through to the nearby humans who are keeping those luscious treats away from her?

After working with elephants in Zimbabwe, researchers reported that the animals are capable of making very deliberate gestures to communicate that desire for more. Their [study](#) was published Wednesday in the journal Royal Society Open Science.

<https://bit.ly/3GFIgZ3>

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## Army Will End Most of Its Ceremonial Horse Programs



*A U.S. Army Caisson team carries the remains of Army Pfc. Tramaine J. Billingsley during burial services at Arlington National Cemetery, Virginia, on Nov. 2, 2010.*

*(Kevin Wolf/AP)*

The U.S. Army's history is closely tied to its cavalry units, those soldiers who rode into battle on horseback. But the service announced Tuesday that it's moving toward a future without the ceremonial horses and will put most of them up for adoption.

The Army, however, will keep operating the Old Guard ceremonial caisson units at Joint Base San Antonio and Arlington National Cemetery for burial honors.

The Army estimates that closing down the units will save about \$2 million a year, and the changes are being made as part of its overall warfighting realignment,

<https://bit.ly/3Ijrj7m>

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## Nobody Has a Personality Anymore

*My generation is obsessed with treating every trait as a symptom of a disorder. You're not shy, you're autistic. You're not forgetful, you've got ADHD.*



*"We are not people anymore. We have been products for a long time, and these are our labels," writes Freya India.*

*(Illustration by The Free Press; photo by PL Gould via Getty Images )*

Today, every personality trait is seen as a problem to be solved. Anything too human—every habit, every eccentricity, every feeling that's too strong—has to be labeled and explained. Therapy-speak has taken over our language. It is ruining how we talk about romance and relationships, narrowing how we think about hurt and suffering, and now, we are losing the words for who we are. Nobody has a personality anymore.

Actually, it's worse than that. Now, we are being taught that our personalities are a disorder. According to a 2024 survey, 72 percent of Gen-Z girls said that "mental health challenges are an important part of my identity." Only 27 percent of boomer men said the same.

<https://bit.ly/4kF018Y>

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## In a First, Surgical Robot Operates All on Its Own



*Research on autonomous surgery has largely focused on simple task automation in controlled environments. However, real-world surgical applications demand dexterous manipulation over extended durations and robust generalization to the inherent variability of human tissue.*

*The Surgical Robot Transformer-Hierarchy (SRTH) performing a gallbladder surgery*  
*Juo-Tung Chen/Johns Hopkins University*

So far, robots in the operating theater have been relegated to assistant roles, acting more like specialist tools for surgeons than getting to perform a procedure solo. The bots face many obstacles before promotion to solo surgeon, like having to contend with

patients' varying anatomy and the potential for unexpected complications. Still, surgeonbots may be closer to reality than previously thought, thanks to a new study that developed a framework for training robots to perform gallbladder removal surgeries fully autonomously.

<https://bit.ly/44BNz3K>

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## How Smell Guides Our Inner World

*A better understanding of human smell is emerging as scientists interrogate its fundamental elements: the odor molecules that enter your nose and the individual neurons that translate them into perception in your brain.*



*Millions of molecules, often in complex bouquets, enter the nose and are processed by neurons to generate a sense of smell that's deeply emotional and personal.*

*Michael Waraksa for Quanta Magazine*

<https://bit.ly/44TS3nD>

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## Is There a Consulting Crash Coming?

*According to business journalist Joe Nocera, they are they bloated, overpaid, and outpaced by AI leaving big firms confronting a future they can't outsource.*



*"So much of the advice they give, and the work they do, doesn't help anybody except their own bottom line," writes Joe Nocera.*

*linkedin.com*

Back in the 1980s when acquisitions were a hot trend, consultant firms like McKinsey & Company, Bain & Company, Deloitte, and PricewaterhouseCoopers had hundreds—nay thousands—of employees who could move into these newly merged corporations and figure out what had to be done.

They could do the dirty work of firing redundant workers, so that the CEO wouldn't have to. And they could come up with the strategies that would make the combined businesses more efficient and more profitable. But by the early 1990s, their utility had diminished. As corporations became lean and mean, there weren't many ways left to squeeze more efficiencies out of the businesses.

Yet the consultants didn't leave. They just got bigger and more profitable. They persuaded companies to take on new projects. And they worked to make sure they were retained anytime a company decided on a shift in strategy.

<https://bit.ly/4lpT3G6>

*Is AI that good? What do you think?*

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## French Astronaut to Get a Taste of Fine Dining in Orbit



*European Space Agency*

A French astronaut has scored a [fine dining reservation](#) that's out of this world, literally. When Sophie Adenot travels to the International Space Station next year, she will swap some of her regular freeze-dried food and canned meals for a delectable selection of French cuisine made by an award-winning chef.

The full menu from Anne-Sophie Pic — the world's most Michelin-starred female chef — features four starters, two main courses, and two desserts. Some of the culinary delights include "foie gras cream on toasted brioche" and "lobster bisque with crab and caraway." While these are a far cry from typical astronaut food, the delicacies will be specially prepared to meet the strict requirements of the ISS. For example, food must be crumb-free and lightweight, and it needs to keep for at least 24 months.

"Cooking for space is an exhilarating challenge," Pic told the European Space Agency. Not only do the bonus spreads ignite the tastebuds, but they also boost astronauts' well-being and help them bond with fellow crew members.

And when you're far, far from home, a few tasty bites can go a long way: "[Pic's] cuisine signature is deeply influenced by the terroir," Adenot said. "This is important to me because I grew up in the countryside, and it will remind me of my roots." Bon appetit, Adenot!

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## Oldest Known Dog Breed Reveals Hidden Human History

*Canine genetic history could settle a debate about a Viking outpost and human migration.*



A close look into canine genetics reveals sled dogs have been around and on the move for thousands of years. Specifically, the Greenland sled dog—called Qimmeq (singular), or Qimmit (plural) in Greenlandic—has a history traceable all the way back 9,500 years to Zhokhov Island in Eastern Siberia. And they’ve been a distinct, isolated group for about 1,000 years of that time. They are among the oldest (and possibly the oldest) dog breed on Earth.

In a [new study published July 10](https://bit.ly/4IedPs) in the journal Science, paleogeneticists mapped the path of these culturally important canines from their ancient origin up to the present day. The findings reveal new insights into Greenland sled dogs’ spread and movement over millennia and also the accompanying human history. The research could prove critical to preserving healthy sled dog populations far into the future.

<https://bit.ly/4IedPs>

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## Mitochondria: Way More Than ‘Powerhouses’



*Jennifer N.R. Smith for Scientific American*

Life cannot exist without energy. All living things take in some kind of food or external chemical energy source, turn it into molecular energy (adenosine triphosphate, or ATP), and then spend that energy to power chemical reactions. These reactions include everything from building and transporting molecules to sending cellular messages — and in complex organisms like us humans, triggering nerve impulses in the brain and body and contracting muscles. The simplest organisms, such as bacteria, make ATP through processes such as respiration and fermentation. But more complex cells — including all big, multicellular organisms on Earth — have their own energy factories known as mitochondria.

<https://bit.ly/44si9y6>

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## **Implantable Device Could Save Diabetes Patients from Dangerously Low Blood Sugar**

*The new implant carries a reservoir of glucagon that can be stored under the skin and deployed during an emergency — with no injections needed.*



*Image courtesy of the researchers*

As an emergency backup, for cases where patients may not realize that their blood sugar is dropping to dangerous levels, MIT engineers have designed an implantable reservoir that can remain under the skin and be triggered to release glucagon when blood sugar levels get too low.

Siddharth Krishnan, a former MIT research scientist who is now an assistant professor of electrical engineering at Stanford University, is the lead author of the study, which [appears today](#) in Nature Biomedical Engineering.

<https://bit.ly/4mcSRtV>

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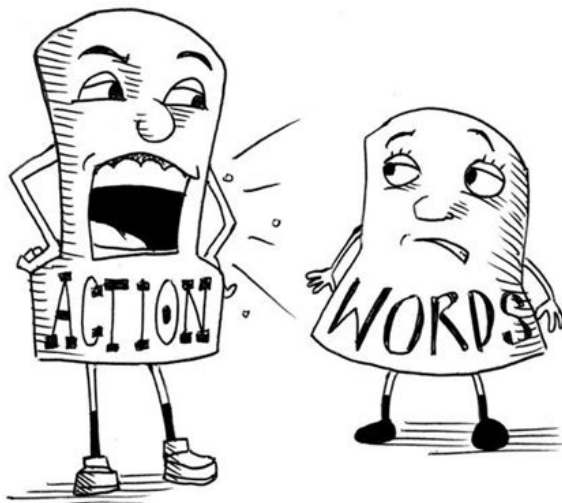


**Studies show that people with  
high IQs tend to be lazy, or  
something like that.**

**I didn't read the whole article. 🤔**

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## **What You Eat Carries More Weight than What You Do, Study Says**



*linkedin*

More than one billion people worldwide live with obesity, a global epidemic that health authorities have blamed on widespread increased consumption of calories and decreased physical activity. But which factor contributes more? After measuring how people from around the world burn calories, a team of researchers concluded that diet plays the bigger role—though not everyone agrees with that interpretation.

Previous research had shown that people in more industrialized societies tend to have a higher average body mass index and body fat percentage, though the trends aren't clear-cut. To learn more, researchers analyzed a large database of urine measurements taken after thousands of people had drunk water tagged with heavy versions of oxygen and hydrogen. As we burn calories, some of the oxygen atoms in the water we drink are used to make the carbon dioxide we exhale. By measuring the excess of heavy hydrogen in a person's urine a few days after drinking the labeled water, the scientists could estimate how much oxygen was turned into carbon dioxide—and, thus, how much total energy a participant burned.

The researchers found that people in more economically developed areas expended less total energy, but that these differences explained just 10% of the relationship between economic development and obesity measures. Their conclusion: The remaining 90% of the trend must be driven by excess energy intake.

Researchers not involved in the work praised how the team used objective measures of energy expenditure. However, the study comes with caveats: For one, its underlying database has far more data from economically developed societies than from hunter-gatherer communities. The study's authors also lack data on what individual participants ate, so they can't tease out exactly how diets relate to higher obesity rates.

<https://bit.ly/44vQGeR>

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**Welcome to the real world!**



**A place where your feelings don't  
matter, and nobody cares if you're  
offended!**



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## **My Walking Thoughts**



**For Sunday July 27 2025**

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## **Then it Was Time to Put the Tigers to Work**

There were 22 hops in the F-11 syllabus, the first one out there in the lead with Lieutenant Caughey as a nursemaid. The next three had me flying on his wing where

he set me out a six feet and put me through some paces that were at first a little scary, not that I would have admitted it at the time.

Satisfied I knew better than to ram into him, Lt. Caughey teased me down to five feet then four. Then on hop number five it was time for him to gather the three of us together and turn us into a team, which we became. While not a threat to the Blues, we turned out to be pretty darn good if I may say so myself.

Over the next several hops, Lt. Caughey had us take different positions, including the lead while he move around pleading with us to tighten up. On about the tenth flight he established us in what would become our final positions for the rest of the program... I in the slot.

Flight fifteen marked our transition to air combat maneuver training where we paired into sections and had at it, allowing us to harbor the belief we were real fighter pilots... at least for a moment. But the real test came in the last two flights where we went out over the gulf, cannons loaded with 75 rounds of 20 mike mike, to duke it out with a 30 foot long banner towed by an F-9 at 185 knots.

The drill was to establish ourselves in a 'squirrel cage' pattern with one bird on 'the perch' 2500 feet above and slight aft of the banner. The second position was the firing point from 900 down to the breakaway at 500 feet, pulling through about 40 degrees of angle off. Next was the breakaway that involved going wings level, relaxing backstick to clear the banner. And finally the climb back to altitude.

As I recall, we made four firing runs in each of the last two hops, returning to base positive we had shot the heart out of the banner, but not one of the three of us scored a hit. Only Lt. Caughey managed to put two holes in the rag, but he softened the blow by admitting this was only the second time in forty firing hops he had done so.

On the way back to the base on our final flight, Lt. Caughey coaxed us into three foot separation for making a diamond flyby at 500 knots. Several minutes later we returned to the field to make our final breakup in fingertip formation.

On the deck, Lt. Caughey joined us at the O'Club for a celebratory brew, remarking that the squadron commander that we were pretty damn good. "Sierra Hotelr5" was the term he used, though at that point in my limited career I hadn't a clue what that meant.

## **Wings**

That was it. All that remained was to wait for Friday when nine of us stood at attention while a Navy Captain from Corpus Christi made a speech and handed us our sheepskins.

Actually, I had to wait until Monday to pick up orders telling me where I would be going next. Several months before I filled out a form asking whether I preferred west or east coast (well west, of course), and if I wanted fighters or attack (fighters).

"You'll like Cherry Point, North Carolina," the officer in charge of the Marine Detachment told me with a straight face. "They've got lots of fighters there."

Pulling out an envelope with my orders, he pointed at a line and said, "Sign here." And that really was that.