

Betsy says HI!!!!

Announcements

The next LABQUEST meeting will be Wednesday, August 13 at 12:30 in the GSA Trailer.

Science Report Highlights

Betsy and Dan thought all the items in following science report from Charles were interesting but most liked the following:

- Tampa Reaches 100° F - for the **first** time in recorded history on 7/27/25.
- CDC Data On Summer Covid Peak
- Chronic Venous Insufficiency
- 5 Surprising Signs Of Gut Problems
- Cholesterol In Food *Doesn't* Connect To LDL Cholesterol In Blood
- White Or Brown Rice
- US States Rated On Managing Plastic Pollution
- Largest US Honeybee Die-Off On Record
- Orbital Launch Company

Science Report

Self-Protective Measures -

You should get your medical advice from official sources, your doctor, or your pharmacist ... not from this Report or the internet. Per recommendations by FDA and CDC, everyone should maintain current vaccinations for the three respiratory viruses: Covid, flu and RSV (for RSV, adults [over 60](#) and children [younger than 8 months](#)) - unless your doctor advises against it based on your medical record. Adults over 50 should have had the [Shingrix vaccine for shingles](#) (two doses 2 to 6 months apart, good indefinitely). Adults over 50 should have the [Pneumococcal Vaccine](#).

- [67,000 Cases Of Widely Sold Deodorant Recalled](#) - [Details](#). FDA announcement [here](#). The reason for the recall wasn't disclosed.
- [The Black Plague \(Yersinia pestis\)](#) - is still very much with us, will always be out there waiting, and is endemic in certain rodent populations in the US (mostly W and SW regions). It is generally transmitted to pets and humans from fleas infesting rodents, but there are other transmission routes. Review the [CDC report](#) of an Oregonian who handled his plague-infected cat *after* he had cut his finger. The cat was under veterinary treatment for sickness, but hadn't been screened or treated for the plague. Thank you CDC, and the Oregon Health Authority, for the reminder.
- [Tampa Reaches 100° F](#) - for the **first** time in recorded history on 7/27/25. See photos of horses enjoying a cooling hose-down, [here](#). [Gerry C., John/Peggy B., John/Norma D.]
- [Best Hot Weather Time for Lawn Watering](#) - [early morning best](#), evening so-so, mid-day worst.
- [Yogurt Recall](#) - FDA has [announced](#) the voluntary recall of certain batches of a widely sold yogurt due to the presence of small fragments of plastic. [Details](#).
- [NIH BMI Calculator](#) - Use the [NIH](#) National Heart, Lung and Blood Institute [calculator](#) to find your Body Mass Index (BMI). Above 25 - overweight. Above 30, check with your doctor, consider better nutrition, and exercise.

- Basal Metabolic Rate (BMR) - Your BMR is how many calories you burn just sitting in your chair. Use the [calculator](#) to get your BMR. Then consult the exercise table to see how many calories you can consume daily with your current exercise plan and still maintain your current weight.
- Body Roundness Index (BRI) - is a new medical screening tool for estimating *visceral* fat, [details](#). Use a calculator to get your BRI [here](#). Additional background from Harvard, [here](#). Results to your doc.

Vaccine and Therapeutic News -

- Hereditary Angioedema (HAE) - The US Food and Drug Administration (FDA) has approved oral administration medication [Ekterly](#) (sebetralstat), to treat these acute swelling attacks. [KalVista Pharmaceuticals](#) (Cambridge MA). [Details](#)
- New Medication Reduces Risk of HIV - In June FDA [approved](#) Yeztugo® (lenacapavir) from [Gilead Sciences](#) (Foster City CA), a *twice annual* preexposure injectable medication designed to reduce the risk of acquiring HIV. See the company's report [here](#).
- A Surprisingly Beneficial Posture - We all spend too much time in fixed postures: [sitting behind a desk](#) at work, sitting in a car or train during a commute, standing behind a counter or podium. A physical therapist advises 'Physical activity needs variety', and recommends lying down on the floor in a prone position (on the stomach) with arms and legs extended as an addition to your stretching routine (stretches the hip flexors and puts the lower back into extension). [Details](#). [Mack W.]
- CDC Data On Summer Covid Peak - See a map and list of states where Covid is currently peaking, and where it is likely to peak next. See also recommendations on who should be vaccinated, [here](#).
- Vaccine Targeting SARS-CoV-2 Variant LP.8.1 - The EU has [approved](#) the Moderna (Cambridge MA) updated vaccine for this variant of Covid. See details on the previous US approval, [here](#).
- Non-Invasive Screening Test For Early Stage Pancreatic Cancer - [Preliminary data](#) suggest that the test under development by [Mainz Biomed](#) (Mainz Germany) has a specificity (true negative) and sensitivity (true positive) performance of 98% and 95%, respectively. The company will now move to the feasibility phase to show clinical relevance. [Sonja B.]
- Avoiding Genetic Disease Caused By Faulty Mitochondria - 8 healthy babies have been born in the UK by replacing the nucleus of a donor egg (with healthy mitochondria) with the nucleus of the mother's egg. So ... when the reengineered egg is fertilized by the father's sperm, the resulting embryo has the DNA of three parents. [UK law has been updated to allow the procedure](#), now also accepted in Australia - not yet in the US. Beginning of the end of certain genetic diseases?
- Chronic Venous Insufficiency (CVI) - 40% of Americans have this condition, widely underdiagnosed. Doppler ultrasound techniques can both diagnose and characterize/localize the condition non-invasively in many doctors' offices. [Increased pressure from backward flow and pooling](#) can seriously damage the tiny one-way valves in the legs/calves/ankles, if not relieved in time.

Other Health Science News -

- 5 Surprising Signs Of Gut Problems - from a registered dietitian, with her reasons and remedies, [here](#). Summary: 1) Feeling down, 2) Unexplained headaches, 3) Too much Ibuprofen too often, 4) Make an avoid-list of foods that disagree with you, 5) Feeling bloated.

- Cholesterol In Food *Doesn't* Connect To LDL Cholesterol In Blood - **Saturated fat is the guilty party.** Counterintuitive? Yes, but a recently released [study](#) of the connection between the cholesterol content of eggs, and LDL (low density lipid) cholesterol in blood, indicated that eating two eggs per day might even *lower* blood LDL ... the number that actually matters for cardiac health. [Publication](#). Eggs are *very* nutritious - but not fried, or messed up with high-saturated-fat oils from butter/bacon. Hard boiled (10 minutes at boiling) eggs are good, and safe from bird flu virus.
- Knees - Increasing stiffness and aching are common with increased age, and after injuries. One [study](#) found that strength training focused on the quadriceps made knee issues less likely. Other recommendations are well cushioned shoes, and [low-impact non-weight-bearing exercises like swimming](#) (particularly after an injury).
- Cardiac Disease Changes - A recent [study](#) published by the American Heart Association found that deaths due to [heart attacks](#), a.k.a. [ischemic heart disease](#), have decreased almost 90% from 1970 to 2022. But ... deaths from [heart failure](#), arrhythmia, and high blood pressure during that same period *increased* by 146%, 106%, and 450%, respectively. [Details](#). Key: exercise, smart nutrition!
- Can Vitamin D Supplements Help Lower Blood Pressure? - Scientific studies give mixed results, details [here](#). Any decision should be made by your doctor based on two pieces of data - your Vitamin D blood level and your blood pressure, both as measured by your doctor. Older people who start out with low Vitamin D levels and high blood pressure are the most likely to be helped, typically with 800 IU daily, as a part of an overall plan of healthy nutrition and exercise. However, there is such a thing as [too much Vitamin D](#). More than 4,000 IU should definitely not be used without medical approval.
- Need More Magnesium? - If a blood test done by your doctor shows low Magnesium, it's often better to try Magnesium-rich natural foods before going to supplements. See 6 of them [here](#).
- How To Get Thicker Hair - Hair thins because the follicles that produce it narrow, so the question reduces to why that happens. A dermatologist [discusses](#) that, and a dietitian gives advice, [here](#).
- Are Your Stools Healthy? - Check the Bristol Stool Chart [here](#). Ideally you should be a Type 3 or 4. This simple check, that you can routinely do yourself in a few seconds, may help catch a problem early, and could provide important information for your doctor. [Details](#).

Practical Nutrition -

- Natural Foods To Reduce Alzheimer's Disease Risk - Registered dietitians recommend 6 natural foods to eat more of, and several types to avoid, [here](#). Saturated fat is the enemy.
- Coffee And Health - See the pluses and minuses from a registered dietitian, [here](#). Tune-up: choose medium roast pure coffee with minimal additives or sugar, cold brew best by far. Do *not* use decaf. Stay well hydrated. Coffee is nutritious. Details about temporary effects on blood sugar, [here](#).
- Corn On The Cob - is a whole grain, with good fiber and other nutrients. [Here's](#) how to shop for it. Cook it for no more than 2 minutes in rapidly boiling water and it's ready to go, with minimal loss of nutrients to the heat. Tune-up: Don't mess it up with saturated fat from butter. You can quickly mix low sodium salt, and your choice of powdered herbs, into a few tablespoons of avocado or olive oil, put some on a flat plate, and roll your corn on the plate to add the flavor of your choice - fat free. Use all you want without guilt. Enjoy!
- 5 Natural Foods With Good Antioxidants - and some tips on how to prepare them, from registered dietitians, [here](#).
- 8 Antiinflammatory Foods For Summer - [here](#).

- How To Pick Out The Perfect Avocado - If you don't want to make enemies in the produce department, limit your in-store inspection to the sight and touch method described [here](#). See also 5 methods for storing cut avocados, [here](#). Avocados are very nutritious. Enjoy!
- White Or Brown Rice - White rice is brown rice with the husk and bran milled away to leave only the germ. Much of the macro and micro-nutrient content of grains, including rice, is contained in the husk and bran, making [brown rice more nutritious than white rice](#). Both are high in carbohydrates, but putting leftover rice through a chill cycle converts much of the carb content to healthier resistant starches.
- Misleading Words For Sugar - High-fructose corn syrup, sucrose, barley malt, dextrose, maltose and rice syrup are all [forms of sugar](#). Certain blood alcohols sometimes used as sweeteners, such as Erythritol and Xylitol, are made by the body and occur naturally in certain foods - but in very small amounts. They have recently been [linked to heart disease and stroke by Cleveland Clinic researchers](#), and should be avoided as food additives. Chemical sugar substitutes to be avoided: acesulfame potassium, advantame, allulose, aspartame, brazzein, lactitol, maltitol, mannitol, neotame, rebaudioside A (reb-A), saccharin, sorbitol, thaumatin and trehalose
- Is Your Favorite Food Ultra-Processed? - and if so, what's a good substitute. View the Northeastern University [TrueFood Dashboard](#).
- Most Nutritious Vegetables and Fruits Rank-Ordered by CDC - See the list [here](#). Chinese cabbage = bok choy.

Environmental Science News -

- Ospreys In Washington DC - The Chesapeake Bay region hosts 20% of the world's osprey population, but they are in decline in the southern Bay. In the Potomac River and tributary waters near Washington DC, however, the population is booming - with a 73% success rate for new chicks! It could be that the decades-long effort, and tens-of-billions of dollars of expense, put into cleaning up the city's combined sewer overflows have now been successful enough to restore the ospreys' natural food supply ... fish! Now Alexandria Virginia, just across the river, is about to complete one more such multi-billion-dollar big clean-up step. Success breeds success, and osprey chicks too. ☺ Details and a video, [here](#). [wait out ad] Next: The two-year construction project for the Potomac shore branch of the DC sewer overflow project began this Spring. More and better fish!
- Almost All Surface Waters In South Carolina Contain 'Forever Chemicals' (PFAS) - And most drinking water in SC is taken from surface waters. [Details](#). The Waterkeeper Alliance found South Carolina's [Pocotaligo River](#) to be the most PFAS-polluted in the US. PFAS has also been found in 95% of beers tested, [here](#).
- PFAS Found In Surface Waters Near Dalton Georgia - One area reported a concentration of 180,000 parts per trillion (ppt), compared to a US guideline of 4 ppt. Local carpet manufacturers are said to be the source. [Details](#)
- Herbicide Widely Used In US Linked To Health Damage - A recent [study](#) done by Friends of the Earth indicated that diquat, which replaced glyphosate in widely used herbicides, is 200 times more toxic than glyphosate. Diquat is banned in the UK, EU, China and many other countries, but not by EPA. [Publication](#). Buy organic.
- Plastic Recycling In Malaysia - A [new law limits the import of waste plastic](#), for the recycling industry, to imports from countries that have ratified the Basel Convention governing the cross-border movement of plastic waste. The US hasn't ratified, so 35,000 tons of US plastic waste annually will need to go elsewhere ... or the US could simply generate less plastic waste.

- US States Rated On Managing Plastic Pollution - See the new report '[United States of Plastics](#)' just released by the Ocean Conservancy. Background details [here](#). [Maryland](#) did well.
- It's Florida! - The constantly evolving effort to control invasive Burmese Pythons now includes setting out [robotic bunnies](#) as python lures. Ecologists at the University of Florida brought in actual swamp rabbits, a favorite python meal, and used motion sensitive infrared cameras to study what there was about them that attracted pythons. The pythons got their rabbits, and the ecologists got their data. Now they have put out 30 *robotic* bunnies designed to move in ways that attract pythons, and then alert the ecologist on duty. They didn't describe what came next. [Kamal S., Grady J.]
- Bees And Hummingbirds Are Competitors - for nectar. See 9 tips for keeping the bees out of your hummingbird feeder, [here](#). The bees may be frustrated, but they won't be hurt. [Peter P., Betty ML]
- Hydrangeas - See advice on how and when to 'deadhead' (remove spent flowers) hydrangeas so that they are encouraged to continue to bloom throughout the blooming season, [here](#). [Rebecca M.]
- Largest US Honeybee Die-Off On Record - [occurred last winter](#), and no one knew why. A large [commercial beekeeper, 55,000 hives, lost 75% of his bees](#) - he rents them out to farmers for pollinating crops like almonds, onions, watermelons and cucumbers. Researchers have recently [published](#) their finding that a newly pesticide (Amitraz) resistant strain of Varoa mite has been spreading a deadly virus among the bees. The science of virology has come a long way, for other reasons. Stay tuned.

Other Science News -

- Mini-Robots Seen Entering Arlington Virginia - Be on the lookout for [Kiwibot](#) mini-robots ([video](#)) trundling along Arlington sidewalks on a 20 day pilot test surveying for gaps and weeds .. to create a map for obstacles to safe passage (for them *and* us). Similar robots from a different manufacturer have already been [tested in Washington DC](#). Food, and other deliveries? [Elizabeth S.]
- Orbital Launch Company - [Rocket Lab](#) (Long Beach CA, Auckland New Zealand) has announced the build-out of the company's 400 foot long ocean landing-barge platform 'Return on Investment' for recovering its (coming) '[Neutron](#)' *reusable* rocket - 13 ton payload Details [here](#). [Wade S.]
- Two Enormous, Madly Spinning Black Holes Have Collided - with the titanic energies released producing the gravity waves now being detected and used to characterize the event. [Einstein predicted gravity waves in 1916](#), but humanity's skills were too puny to test the prediction until 2001, and detailed images were only created lately (2015). Now there are three gravity wave 'telescopes' in the world. The US facility is the National Science Foundation funded [LIGO](#) (Laser Interferometer Gravitational-Wave Observatory), operated jointly by Caltech and MIT. Just as human distance/ranging vision depends on the several centimeter separation between two human eyes forming the base of a triangle (triangulation), LIGO depends on the separation between its two base stations - one in Washington state, one in Louisiana. Thanks NSF! We still have a [lot to learn](#).
- NASA Launching Two *Solar* Weather Forecasting Satellites ([TRACERS](#)). We are coming up on the peak of the 11-year cycle of solar storm activity, so there's a lot going on. [congratulations Wade S.]

Nice Thing - [skip ad, full screen]

- Brandenburg Concerto No. 6 In B Flat Major - J. S. Bach
- Performed by the Freiburger Barockorchester - [here](#). [Sonja B.]
- Performed by Claudio Abado and the Orchestra Mozart - Teatro Municipale Valli, Reggio Emilia, Italy, 2007 - [here](#)