

Betsy says HI!!!!

Announcements

The next LABQUEST meeting will be Wednesday, April 9 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:

- Measles Cases In Texas - 3/14 Update: Case numbers have risen to [259](#). Only two had been fully vaccinated
- Supply Shortage Of Hemodialysis Bloodlines
- FDA made its recommendation for the Flu Vaccine For 2025-6 Flu Season
- Reduction In Youth E-Cigarette Use - 70% decline since 2019
- Tea Can Offer Some Protection From Heavy Metal Contamination In Drinking Water
- Increased FDA Focus On Infant Formula Nutrients And Contaminants
- Artificial Dyes In Food
- Bald Eagles And Ravens Thriving In Greater Washington DC Area
- Boom Supersonic

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](#).

- [Measles Cases In Texas](#) - 3/14 Update: Case numbers have risen to [259](#). Only two had been fully vaccinated. 3/18 Update: [279 cases](#). More details [here](#).
- [Recall Of Certain Ice Cream Products From A Maryland Manufacturer](#) - Last June Totally Cool (Owings Mill MD) announced the recall of certain ice cream products "... because they have the potential to be contaminated with Listeria monocytogenes, an organism which can cause serious and sometimes fatal infections in young children, frail or elderly people, and others with weakened immune systems." [Details](#)
- [Recall Of Medtronic Embolization Device](#) - This [FDA recall](#) involves "... removing the Pipeline Vantage 027 device models from where they are used or sold." The recall also updates instructions for using the Pipeline Vantage 021 device models.
- [Supply Shortage Of Hemodialysis Bloodlines](#) - See the FDA notice to health care providers, [here](#).
- [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 -

- Composition Of Flu Vaccine For 2025-6 Flu Season - The Agency has made its [recommendation](#) to manufacturers, posted the information, and does not expect any delay in providing the vaccine. The trivalent vaccine will include two influenza A subtype viruses (H1N1 and H3N2) and one influenza type B virus.
- Reduction In Youth E-Cigarette Use - There has been a 70% decline since 2019, and a recent study indicated that [FDA's youth e-cigarette prevention campaign](#) played an important part in [preventing over 400,000](#) youth (11-17) from starting to use e-cigarettes between 2023 and 2024. Well done FDA.
- Hypertrophic Cardiomyopathy (HCM) In Cats - HCM is the most common heart disease in cats, and one of the most common causes of death. FDA has [announced](#) approval of Felycin-CA1 (sirolimus delayed-release tablets) for this indication, the first such approval for use in cats with HCM. [TriviumVet](#) (Waterford Ireland).

Other Health Science News -

- Promising Lead For Pancreatic Cancer Screening Test - Pancreatic cancer is often detected too late for effective treatment. Researchers have recently identified [promising mRNA biomarkers](#) that have the potential to be used for the non-invasive detection of pancreatic cancer using a non-invasive blood test. Stay tuned for further developments on early detection of this deadly cancer.
- Tea Can Offer Some Protection From Heavy Metal Contamination In Drinking Water - A recently [published](#) study has shown that tea *leaves*, and tea *bags* made of natural materials such as cellulose, can absorb/remove heavy metals such as Lead, Chromium and Cadmium from the water they are steeped in. [Details](#). Municipal water supplies are subject to EPA regulation, but private well water and bottled water are not. Water bottled in plastic can pick up contaminants from the plastic, such as plastic nanoparticles and phthalates.
- Increased FDA Focus On Infant Formula Nutrients And Contaminants - The US Department of Health and Human Services (HHS) has directed the US Food and Drug Administration ([FDA](#)) to review infant formula nutrition, clarify labeling, and do increased testing for contaminants (heavy metals). HHS statement [here](#).
- Is There Plastic In Your Chewing Gum? - And is the list of ingredients *designed* to be vague about identifying certain chemicals? Could some of the contents also be found in plastic straws and car tires? [Chad C.]
- FDA Coffee Creamer Recall - See which flavors were recalled, and the list of 31 states where they were sold, [here](#). FDA referenced more than one reason for the recall. The Agency has classified this as a [Class 2 recall](#).

- Artificial Dyes In Food - The Secretary of the US Department of Health and Human Services (HHS) met recently with major packaged food companies to discuss removal of artificial dyes from their products. [Details](#).
- 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 -

- Good And Bad Foods For The Heart - [here](#). Oils Tune-up: For cooking at high temperatures (up to 550°F) use avocado oil. For temperatures 350°F and below, down to room temperature salads, use extra virgin olive oil. You can do anything needed with those two. Do not use seed oils, because their purity and processing is uncertain. No solid fats like butter, margarine, shortening, lard. No frying, *especially* no deep frying. [Chad C]
- Chocolate Covered Strawberry Greek Frozen Yogurt Bark - a healthy snack from a registered dietician, [here](#).
- Is Peanut Butter Healthy? - Actual *pure* peanut butter (**nothing but peanuts**) is full of good nutrients, and is very healthy according to registered dietitians, [here](#). None of the big name brands you will find at the store qualify, because they have additives: salt, sugar, strange oils, preservatives, stabilizers, etc. Solution: go to a store (Whole Foods) that has its own peanut grinder supplied with just peanuts, push the button, and get *pure* peanut butter. You can stir in a little salt (low sodium, iodized) at home if that's more to your taste.
- Are Bananas Healthy? - [Yes](#) .. but .. choosing bananas that are slightly green when eaten will make them a better source of the all important fiber you need (ripening causes a loss in the pectin content that carries fiber). A large [increase in fructose, glucose and total sugar](#) is also avoided. **Eat slightly green bananas, only.**
- 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 -

- Big Bear Valley Live Eagle Cam - See bald eagles Jackie and Shadow on their nest in Big Bear Valley, [here](#). See the eaglets being fed. [full screen, Louise F.]
- Bald Eagles And Ravens Thriving In Greater Washington DC Area - [26 eagle nests](#) were identified between Great Falls and Mt. Vernon along the Potomac River last year. For apex predators like eagles to survive, they need an appropriate habitat, clean water and a good food source (fish). Thanks to the *enormous* effort and expense put in by Alexandria VA and Washington DC (with a little help from the feds and Richmond), this

segment of the Potomac is dramatically cleaner, and uncontaminated fish stocks have increased. They did it!

- From Sewage .. And Scum ... To Swimming In Switzerland - In the 60's they had some of the [dirtiest water in Europe](#). Now [see](#) the dentists, secretaries, judges, teachers and retirees all brave the (46° F) pristine water of Lake Geneva during their lunch break. The Swiss did it too!
- Crocodiles Are Native To Florida - not just alligators. They were at the [edge of extinction there](#), but are now on the come-back ... [in the cooling canals](#) of the Turkey Point Nuclear Generating Station ... with a [bit of help](#) from the station's owner Florida Power and Light (FPL). Thanks FPL! [Bette Anne S., Marlene T.]
- Tour The Colorado Mountains By Train - The Rocky Mountaineer may be America's most luxurious train. The views are spectacular, and your carbon footprint will be small - good touring choice for seniors. [Details](#)
- Removing Dams In The Northeast US - There are about [30,000 small dams blocking tributaries of rivers from Maine down to Maryland](#) - most having long ago outlived their original purpose. Removing these small dams, and allowing them to flow naturally, has many benefits: reduces risk of flooding, restores fish migratory pathways, creates recreational and economic opportunities, provides habitat restoration for a range of wildlife. For a local DMV example, visit the fish ladder across Rock Creek from [Pierce Mill](#) - Visitor's Center, National Park Service, Rock Creek Park, Beach Drive, Washington DC. It provides a pathway for shad and blueback herring to bypass the dam originally built to impound water for powering the historic mill in 1829 [Harvey B.]
- Two Dams Coming Down On California's Eel River - Scientists and local residents are [preparing for big changes](#). The migration of [Chinook](#) salmon and steelhead trout has been blocked for over 100 years. Their populations are expected to rebound sharply when the Cape Horn and Scott dams are removed.
- Risks Of Open Water Salmon Farming - Diseases in captive salmon kept in open water net-pens can spread to wild salmon, and to other species of fish. See a description of an extreme event that occurred in Tasmania Australia, [here](#). Self-contained inland salmon farming eliminates this kind of risk, and is making a beginning, but has not yet reached commercial scale. Water is purified and recycled, not discharged. Waste is composted.
- The Largest Solar Farm In Ohio - Fox Squirrel Solar just went on line: built by EDF Renewables North America, 1.4 million solar panels, 159 inverters, 577 MW (power for 118,000 homes), Madison County Ohio, [3,766 acre site](#). Photo and details [here](#).
- India Adds Historic Amount Of Renewable Energy In 2024 - 24.5 GW of solar and 3.4 GW of wind. [Details](#)

Other Science News -

- Nuclear Powered Space Tug - The '[Sunbird](#)', a concept design from UK start-up [Pulsar Fusion](#), would be stationed in orbit to provide a speed boost to other rockets. The company suggests that the time for travel to Mars could be cut to as little as 4 months, about half the usual.
- Drill Baby Drill - ... down to about 10 feet ... on the Moon. See the sparks fly ([video and details](#)) as Firefly Aerospace's Blue Ghost moon lander begins its drilling program in Mare Crisium, a basin in the NE part of the Moon's near side. The goal is to measure the temperature, and the flow of heat, from inside the Moon.
- iPhone Battery Charging - Routinely charging an iPhone battery to 100%, and then leaving it on charge, can shorten its life. Most phones can go a whole day without needing to be

recharged. The best recharge method is to engage the [Optimized Battery Charging](#) feature, and set the phone to charge overnight. [Details](#).

- [Boom Supersonic](#) - The company's demonstrator aircraft XB-1 has successfully broken the Mach 1 sound barrier (761 mph) in a recent test flight. See the NASA photograph of the event [here](#) using Schlieren photography. There was no audible boom on the ground - key step toward a supersonic passenger aircraft.
- [Ukraine Plans To Purchase 4.5 Million Drones In 2025](#) - essentially [all from Ukrainian companies](#). 1.5 million were purchased in 2024, 96% from Ukrainian companies.
- [US Marines Contract For Base Protection From Drones](#) - [Anduril Industries](#) (Costa Mesa CA) has been awarded a \$642 million contract to develop a system for protecting US Marine Corps bases against Class 1 and 2 drones (less than 55 lbs with max altitude of 3,500 ft). The company already has a \$250 million contract for an electronic jamming system called Pulsar, and a \$200 million contract for a mobile air defense system that can be mounted on vehicles like Humvees. The Ukraine theater of war has taught the world much.

Nice Thing -

Madama Butterfly - opera composed by Giacomo Puccini, aria *Un Bel Di* conducted by André Rieu, [here](#). [Jenna D.]