

Betsy says HI!!!!

Announcements

The next LABQUEST meeting will be this Wednesday, January 8 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:

- Pasteurization
- USDA Has Issued A Mandatory Order For *Raw* Milk Testing
- The B Vitamins (B Complex) - their main job is turning food into energy the body can use.
- Holographic Doctors At Rural Hospitals
- Health Impact Of Closing Coal Fired Power Plants
- Toxic Flame Retardants Found In Kitchen Tools
- Will FDA Ban Red Dye No 3 From Foods
- Dark Chocolate May Reduce Diabetes Risk
- Coffee Is *Good* For Gut Health
- EV Charging Hubs Near Interstate Highways

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](#).

- [Pasteurization](#) - Six things to know about it, [here](#). Summary: pasteurization heats milk to 161°F for 15 seconds, a.k.a. high temperature, short time (HTST), unopened shelf life of about two weeks. The flavor/nutrition of pasteurized milk is unchanged by the pasteurization process. *Organic* milk is sometimes **ultra-pasteurized**: heats milk to 280°F for 2 seconds. The higher temperature denatures some of the proteins and caramelizes some of the sugars, triples shelf life, no pesticides/antibiotics. Good trade-offs.
- [Risk Factors For Diabetes And Prediabetes](#) - CDC advice on those you can change and those you can't, [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 -

- Brain Imaging Of Tau Tangles To Diagnose Alzheimer's Disease (AD) - The UK's Medicines and Healthcare products Regulatory Agency (MHRA) has [approved](#) Eli Lilly's Tauvid radiopharmaceutical (flortaucipir) as an imaging agent to be used in acquiring Positron Emission Tomography (PET) scans for this indication. Tauvid was approved for use in the US in 2020.
- Zepbound (tirzepatide) Beats Wegovy (semaglutide) For Weight Loss - The preliminary results of a head-to-head, double blinded human trial showed the average weight loss achieved was 20.2% vs 13.7% respectively. Publication in a peer reviewed journal is expected early in 2025. Eli Lilly press release [here](#). Tirzepatide addresses *two* receptors in the gut: GIP and GLP-1. Semaglutide addresses only GLP-1. [Background](#)
- Late-Stage Metastatic Pancreatic Cancer And Vitamin C - The results of a Phase 2 clinical trial by researchers at the University of Iowa showed that the survival rate doubled from 8 months to 16 months when **high dose Vitamin C** was added to the standard of care chemotherapy treatment. [Publication](#) An earlier [study](#) with glioblastoma brain cancer also found improvements when vitamin C was added to standard of care chemotherapy and radiation. [Harvey B.]
- Ventilator-Induced Diaphragm Dysfunction - During extended time on a mechanical ventilator, at least 96 hours, the muscles of a patient's diaphragm can atrophy, making it difficult to breathe when the ventilator is removed. FDA has given market clearance to the '[AeroPace System](#)' to reactivate the diaphragm by stimulating the phrenic nerves.
- FDA Has Approved Treatments For Two Types Of Lung Cancer -
 - [Imfinzi \(durvalumab\)](#) - from AstraZeneca for limited-stage small cell lung cancer (LS-SCLC).
 - [Bizengri \(zenocutuzumab-zbco\)](#) - for advanced, unresectable, or metastatic *non-small* cell lung cancer (NSCLC) with a neuregulin 1 (NRG1) gene fusion ... **or** ... for metastatic pancreatic adenocarcinoma harboring a NRG1 gene fusion.
- 3-D, Cold Cathode, Low Dose X-Ray Tomosynthesis - FDA had previously cleared the NanoX Arc System for musculoskeletal whole body imaging (3-D imaging like CAT scans). The Agency has now cleared the system for general use, including these specific additional areas: pulmonary, intra-abdominal and paranasal sinus. [Details](#). [Nanox](#) (Petah Tikva Israel) Way cheaper to buy and maintain than a CT X-Ray machine, uses an array of solid-state diodes for generating X-rays.

Other Health Science News -

- The US Department Of Agriculture (USDA) Has Issued A Mandatory Order For Raw Milk Testing - See the details for sampling, testing and reporting [here](#). FDA and USDA have tested *pasteurized* milk, and found it safe.
- 15 Symptoms Of Vitamin C Deficiency - A registered dietician describes [15 symptoms](#), and the consequences. She also provides a quantified list of fruits that provide all the C you need in a tasty way. Do yourself this favor.

- The B Vitamins (B Complex) - There are 8 of them, and their main job is turning food into energy in forms the body can use. See a [description of each](#), its particular task, how much you need, and natural food sources.
- Vitamin D3 Is Related To Better Cognitive Function - 25% of US adults are deficient, and 41% are insufficient. What to do about it? Vitamin D3 not Vitamin D2 is the critical form, and is mostly found in animals - but not in the quantities you may need in winter, or in northern latitudes (North of Charlotte NC), when your skin doesn't make much. See this [information on supplements](#), but check with your doctor and get tested before proceeding.
- Holographic Doctors At Rural Hospitals - The idea is being tried at a small rural hospital in Texas, Crescent Regional Hospital, for the first time in the US. See how that works, [here](#). Beam him up! [Robby H.]
- Health Impact Of Closing Coal Fired Power Plants - A recently published study from the University of California San Diego estimated that between 2005 and 2016, shutting down coal power plants saved [26,610 lives and 570 million bushels](#) of corn, soybeans and wheat. In that same period the [study](#) estimated that coal plants in continuing operation contributed to more than 329,000 premature deaths, and the loss of 10.2 billion bushels of crops - about half of US production.
- Health Impact Of Coal-Based Steel Making - 460-892 premature deaths are linked largely to coal-fired steel making every year, and 250,000 cases of asthma. Replacing coal with Hydrogen, or electric arc furnaces, would reduce carbon pollution by 95%, and remove most of the health impact.
- Toxic Flame Retardants Found In Kitchen Tools - A recently published [study](#) found that [85% of black plastic kitchen utensils \(spatulas, spoons and ladles\) contained toxic chemicals](#) such as brominated flame retardants and organophosphate flame retardants (present in high concentrations in recycled electronics) that can leach into the food they come into contact with. Other kitchen based hazards are plastic chopping boards that generate microplastic particles ([endocrine disrupting chemicals](#)), and pans with non-stick surfaces containing [PFAS \(per- and polyfluoroalkyl substances\) linked to liver damage, thyroid disease, obesity, fertility issues and cancer](#). Summary: use only stainless steel (SS) utensils, untreated wooden chopping boards, SS/Aluminum/glass/ceramic food prep bowls and SS cooking pots and pans.
- More PFAS Found In Maryland - See a recent [report](#) regarding groundwater contamination from a soybean processing facility in Salisbury MD, [here](#). In April the US Environmental Protection Agency **finalized a rule** reducing the drinking water limit for PFAS from 70 parts per trillion to 4 parts per trillion.
- Foods That Cause Skin Aging And Wrinkles - According to a registered dietitian, the two big factors for skin aging are sun exposure and advanced glycation end products (AGEs) - formed when protein or fats combine with sugar. See the list of 11 foods that speed up skin aging in that way, and what foods to trade them for, [here](#).
- Will FDA Ban Red Dye No 3 From Foods - such as candy, cereals, baked goods, and drinks, as it has already done for cosmetics and medications? There is a [petition before the Agency](#) to do that. Red No. 3 (erythrosine) is an oil based substance made from coal tar - cheaper, more consistent appearance, and longer shelf life than natural substances. Details and a video [here](#). California will **ban** the following artificial colors from public school meals, drinks and snacks beginning at the end of 2027: Red 40, Yellow 5, Yellow 6, Blue 1, Blue 2 and Green 3.
- Coconut Water For Post-Exercise Hydration - See a registered dietitian's 6 reasons for recommending coconut water, [here](#). Tune-up: natural coconut water (not coconut milk), not from concentrate, no additives (especially no salt or sugar), choose organic, shelf stable. **No ultra-processed energy drinks ever.**

- [Resting Heart Rate](#) - is an important biomarker to know. You can learn to check it yourself by the two finger method, or get an over-the-counter heart rate monitor. The normal range is 60-100 beats per minute, with lower being better. Readings outside that range should be reported to your doctor promptly. [Reference](#).
- [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](#).
- [Rivian Tops Ratings In Vehicle Owner Satisfaction](#) - with EVs taking 2 of the top 3 spots. See the [full list](#).

Practical Nutrition -

- [How To Store Bread](#) - to reduce waste due to staleness or mold, [here](#). Effective, low tech, keep in the fridge.
- [Dietician's Favorite Bread](#) - [details](#). Summary: sprouted whole grain bread. Look for it *in the freezer case* at the grocery, and keep it in the fridge at home in a small vented bread box (above). Should be good for two weeks.
- [Dark Chocolate May Reduce Diabetes Risk](#) - A study ([publication](#)) published in December found that those eating a *little* dark chocolate (about 1 oz/day) have a [21% lower risk of developing Type 2 diabetes](#). Tune-up: the chocolate must be at least 70% cacao, *not* milk chocolate. It will be a bit hard, until warmed up to body temperature, with nuts ok. Brands from California are best since they check for heavy metals. [Sam J.]
- [American Association Of Retired Persons \(AARP\) Describes 6 Benefits Of Coffee](#) - [here](#). Note: plain black coffee, not: cappuccinos, lattes, macchiatos, decaf. Tune-up: cold brew coffee best preserves the nutrients that AARP found healthy, it's easy to make at home, keeps in the fridge for several days, and can be served with several healthy finishes ... 2% milk, oat milk, almond milk, natural sweeteners like Monk fruit extract.
- [How To Store Broccoli](#) - [here](#).
- [Choosing A Quality Olive Oil](#) - Five things to look for on the label, [here](#). Tune-up: It doesn't get better with age, so check the use-by or harvest date. It doesn't need to be Italian. Some of the best are produced in California.
- [The Importance Of Vitamin D](#) - details and a list of foods that have it, [here](#). Summary: oily fish and fortified foods like milk and some cereals. Getting sufficient Vitamin D is especially critical in the dark winter months.
- [Coffee Is Good For Gut Health](#) - Researchers at Harvard, and Italy's University of Trento, have recently [published](#) a study showing that [coffee produces a significant yield of "good" bacteria](#) for the belly, specifically, a coffee-loving microbe called Lawsonibacter. You also get a boatload of antioxidants, some good fiber, and a more regular urination pattern. Tune-up: hot brewing denatures antioxidants, so switch to cold brew for best results. [Practical at home](#), really. Less acidic than hot brew, with a sweeter, more mellow flavor, good in the fridge for up to two weeks. Handy brewing carafe: 'Takeya Patented Deluxe Cold Brew Coffee Maker'.
- [What To Eat More/Less Of To Reduce Risk Of Heart Disease, Stroke, Diabetes](#) - Harvards gives a brief list of dos and don'ts, with the corresponding percentage of reduced/increased risk estimated for each item, [here](#).
- [The Importance Of Carbohydrates](#) - Your body needs carbs ([publication](#)), good carbs not bad carbs. See a list of 10 natural foods with *good* carbs recommended by a registered dietician, [here](#). *Complex* carbohydrates should be most of your carb intake. Examples: *whole* grains, fruit and potatoes *with* skin, vegetables, legumes.

- Potatoes Or Sweet Potatoes Healthier? - See side-by-side nutritional chart [here](#). They are about the same, but sweet potatoes get the edge because their beta carotene (an [antioxidant](#)) is converted by the body to a boatload of Vitamin A. More than half of the nutrients of both are in the skin, so **just scrub rather than peel**. And don't mess them up with butter, salt, etc. See the downlink for some healthy recipes. [Arlene G.]
- Is Almond Butter Or Peanut Butter Healthier? - Both are healthy. Almond butter is higher in fiber, [vitamin E](#), [magnesium](#), iron, calcium, and has a 25% higher concentration of monounsaturated (good) fats. So [Almond butter wins](#). Tune-up: grind it yourself at the grocery store nut grinder, to make *sure* it has **nothing but almonds** - no sugar, no salt, no preservatives, no stabilizers, etc. You may need to stir it a bit just before each use. Stirring in a bit of low Sodium salt (or powdered herbs) to taste is optional. If it won't separate, it isn't real.
- Getting To Know Mung Beans (Vigna radiata) - [Details](#) ... whole or halved beans, sprouted (sprouts sticking out of the bean), or the bean sprouts you often see but didn't know were mung beans. Nutrition: terrific fiber (one cup of boiled beans is 210 calories and half your recommended daily value of fiber), good protein, awesome folate (80% dv), 20% dv of phosphorus, vitamin B1, magnesium, and manganese. See tips for cooking/storage.
- Healthy Snacks For Weight Loss - actually. Keep these [10 healthy dietician recommended snacks](#) on hand, so that when you are moved to reach for a snack it will be a healthy one.
- 9 Natural Foods Rather Than Weight Control Drugs - [Details](#). They activate similar metabolic pathways to satisfy hunger and [curb your appetite](#).
- 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 -

- Easternmost US City - and the deepest port in the US. Eastport Maine lies at the end of a long causeway that also carries its only power line. During powerful Nor'easter storms power is often lost, may be down for days, and the town backup generator was shut down in 2018. In 2021 Eastport received a Department of Energy '[Energy Transitions Initiative Partnership Project](#)' grant to fund work on [developing a localized grid fed by solar, tidal and and storage](#). **This year they received a further \$200,000 second round grant**. In January Eastport Solar's 1 MW project will go on line, to join about 18 MW of distributed solar. Stay tuned.
- Wetland Conservation Projects Converted From Massachusetts Cranberry Bogs - Due to climate change, rising sea levels, and competition from WI, cranberry farming in MA has become increasingly challenging. The state, and growers associations, are working together to decide which bogs would be candidates for conversion to naturally flushed salt water marshes. [Details](#).
- EV Charging Hubs Near Interstate Highways - The Charging and Fuel Infrastructure ([CFI](#)) Grant Program, funded through the US Department of Transportation (DOT) by the US

Bipartisan Infrastructure Act, **has now allocated over \$1 billion** to nearly 100 projects across the US, encouraging private investments and expanding the EV charging network to make EV ownership more practical and convenient. The first CFI funded EV charging hub in the East ([details](#)) came on line in November near Interstate 91 in rural Deerfield MA. Thanks DOT Secretary Buttigieg.

- Electrification Of US Mail Trucks - Congress [appropriated \\$3 billion to the US Postal Service \(USPS\) to purchase EV mail trucks and charging infrastructure](#) - \$1.2 billion for EVs, with plans to buy nearly 66,000 EVs by 2028. The contract has been awarded to [Oshkosh](#) Corporation, with manufacturing to be done at its South Carolina plant. **Deliveries under the contract have already begun**, and US Postmaster General Louis DeJoy [said recently](#) that USPS plans to proceed with the contract as is unless there is *congressional* action.
- European Union (EU) Innovation Fund - has awarded grants totaling \$5.19 billion to 85 net-zero-carbon projects across 18 countries. [Two new electricity-generating tidal farm projects in France](#) have now been [awarded \\$55 million to generate 29 MW](#) of sustainable power to the local grid. One will power up in 2026, the other in 2028. Doesn't take up farm land, or obstruct anyone's view. [Jules M.]
- EU Offers \$4.8 Billion In Grants For Clean Energy Battery And Hydrogen Projects With Supply Chains Not Sourced In China - cathodes, anodes, electrolyzers, refined rare metals. [Details](#)
- EV Charge Stations Added To Standard Street Lamp Posts In Two Hours - Start-up [Voltpost](#) (Brooklyn NY) partnering with ATT, [plans to install Level 2 EV charge ports on](#) street lamp posts in [Detroit](#), as well as sites in Illinois and New York. Voltpost will install the charger, and partner with ATT to add internet connectivity.
- New Low-Cost Line Of EVs From Kia - With a rumored price range of \$35-40,000, [details](#). The new Kia EV4 was seen being tested in the US for the first time recently, with the expectation that it will be released for sale in the US soon. This is the first of what may be a series of new low-cost EVs from several companies. Timely.
- New Generation Of Honda Electric Motorcycles - expected starting in 2025. Video [here](#).
- 1.1 Billion Dollar Toyota Solar Farm in Texas - Canadian energy company [Enbridge](#) (Calgary Canada) will build the 815 MW solar project [Sequoia](#) 150 miles West of Dallas Texas ... on behalf of Toyota and ATT through long term power purchase agreements for essentially all of the power produced. First power expected in late 2025.
- Battery Powered Vertical Take-Off And Landing (VTOL) Air Taxi - Joby Aviation (Santa Cruz CA) will receive a [\\$894 million investment](#) from Toyota Motor Company (Tokyo Japan) to help make this happen. The first three prototypes have been built, and one has taken a first flight out of lower Manhattan NY - Manhattan to JFK Airport in 10 minutes. Quiet, no emissions, pilot+4 passengers, equipped for autonomous (no pilot) flight.
- Enhanced Sidewalk Technology - with reduced carbon cement that uses recycled glass to lower net emissions. The city of Syracuse NY will begin using [recycled glass to replace 20% of the cement in new sidewalks](#), reducing the carbon footprint and enhancing the concrete's performance and durability. Good show Syracuse!
- Clean Hydrogen Hubs (H2Hubs) - The US Department of Energy (DOE) **has awarded \$2.2 billion** as the [federal cost share for two Regional H2Hubs](#) - \$1.2 billion for the Gulf Coast Hydrogen Hub led by [HyVelocity](#) and \$1 billion for the Midwest Hydrogen Hub led by the [Midwest Alliance for Clean Hydrogen](#). Funding is through the Department of Energy (DOE) from the Bipartisan Infrastructure Act. Thanks DOE Secretary Granholm.
- Metal Recycling To Reduce Mining Needs - More copper, nickel, lithium, cobalt and other metals will be needed for EVs, renewable energy projects, and grid expansion. Recycling could [reduce the need for new mining activity by 25-40%](#).

Other Science News -

- World's Most Powerful Supercomputer - El Capitan can perform 1.7 quintillion floating point operations per second (1.7 exaFLOPS). Located at the Lawrence Livermore National Laboratory, it will be used to design, and simulate the performance of, nuclear weapons.
- Three Arizona Semiconductor Fabrication Facilities (Fabs) - are to be built in Phoenix Arizona by the Taiwan Semiconductor Manufacturing Company (TSMC), incentivized by a [\\$6.6 billion grant and a \\$5 billion loan recently finalized](#) by the US Department of Commerce - funds from the US Chips and Science Act. TSMC will invest \$65 billion in the three fabs - the [largest such foreign investment in US history](#). Thank you Commerce Secretary Raimondo.
- Intel Semiconductor Manufacturing Grant - Intel (Santa Clara CA) has received a [finalized \\$7.86 billion grant](#) award from the US Chips and Science Act through the US Department of Commerce. The [grant](#), with an additional \$3 billion contract under the Secure Enclave program for US government advanced semiconductor requirements, and a 25% US investment tax credit, will incentivize a US based Intel investment plan of over \$100 billion in AZ, NM, OH and OR. Thank you US Commerce Secretary Raimondo.
- Space Rated Solar Cells - Rocket Lab USA (Long Beach CA) has [secured a \\$23.9 million CHIPS and Science Act grant](#) from the US Department of Commerce to enhance its [space qualified semiconductor operations](#) in Albuquerque New Mexico. [Details](#) Thanks Secretary Raimondo.
- India Joins The Long Range Hypersonic Missile Club - with a recent successful launch. [Details](#).
- Boom Supersonic - The company's one-third scale prototype supersonic passenger plane (Baby Boom) has completed its [8th successful flight test](#), and is scheduled for its first supersonic flight by the end of 2024. Boom *Overture* is designed for Mach 1.7, and could fly as soon as 2029 - New York to London in 3.5 hours.
- Earth's Northern Magnetic Pole Moving Toward Russia - The magnetic pole is always moving, but the recent movement is unusually fast, about [16 miles per year](#). Possible causes: changes in the circulation of molten iron in the Earth's outer core (source of the magnetic field), high energy solar particles interacting with the [magnetosphere](#), or it could foreshadow one of Earth's periodic pole reversals (North becomes South) - *really* not good, since that could temporarily interrupt the magnetic field shielding earth from cosmic radiation and solar radiation. Navigation systems are periodically updated by NOAA to avoid [navigation](#) errors for satellites, aviation, shipping. Birds like geese and ducks that sense magnetic fields directly to guide their migration are on their own [Mack W.]
- Ancient Battle Site Located Using Declassified Spy Satellite Images - The circa 630 CE battle of al-Qadisiyyah was the opening chapter of the Islamic conquest of Mesopotamia and Persia. In a study recently published in the journal *Antiquity*, archeologists describe their process of cross-correlating historical texts, modern aerial photos, on-the-ground evidence, and declassified 1970s US spy satellite imagery to locate the battle site 18 miles south of Kufa in Iraq. [Details](#). [Jason W.]
- First Ukraine-Produced Long Range Rocket Drones - 'Peklo' or Hell in Ukrainian, have now been handed over to Ukraine military forces by their Ukrainian manufacturer Ukroboronprom. They [fly like cruise missiles](#), terrain-following to make them hard to detect and intercept, and have a range of over 400 miles .. more than twice the range of their British/French [Storm-Shadow/Scalp](#) equivalent (155 miles) or the US tube-launched [ATACMS](#) (185 miles). Top speed 430 MPH. Deadly
- More F-16s Delivered To Ukraine - Two additional F-16s, marking a total of 6 out of a promised 19, have now been delivered to Ukraine by Denmark. [F-16s are capable](#) of launching cruise missiles from a distance.

- [\\$2.5 Billion For New Combat Vehicles \(CVs\) to Sweden and Denmark](#) - The UK company BAE Systems has received a contract to provide 115 CV 90s to Denmark and 50 to Sweden. The deal also finances more CV 90s for Ukraine, Sweden has already provided 50. The Dutch government also agreed with Sweden to set up CV90 production in the Netherlands, and expects to produce at least 180 to an upgraded standard. [Details](#). CV 90 = Combat Vehicle = Combat Fighting Vehicle.
- [New US Military Equipment Support Package For Ukraine](#) - \$988 million for unmanned aerial systems, rocket munitions and support for maintenance and repair programs. See the official US Department of Defense announcement [here](#). Thank you DOD Secretary Austin.

[Nice Thing](#) - [full screen]

[Pinocchio](#) - Walt Disney Pictures, 1940

- [When You Wish Upon A Star](#) - Linda Ronstadt reimagining, 2013, [here](#).
- [When You Wish Upon A Star](#) - Sara Bareilles reimagining, 2023, [here](#).
- [When You Wish Upon A Star](#) - Disney *original*, [here](#). Sung by Jiminy Cricket (sung by tenor Cliff Edwards) during the visit of the Blue Fairy. [Lyrics](#). [skip ad]