

# **Being Alive**

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*FlowerGrams* 

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It's amazing, how a small gesture can make such a world of difference to someone you love and care about. Flower Grams allow you to make that connection. \$20 is all it takes to give a little cheer. <u>WWW.eibeing.com</u>, click on the flower for more information!

# Farmlink

This organization came across my desk and I was thrilled to read that high quality food was going to people most in need. Food was getting where it needed to be by the efforts of farmers, students and individuals working toward the greater good. Good News and Good Things are happening during COVID. I hope you will visit the links to their website to learn more. We can all be part of something new and wonderful that brings all of us together! - Jean

#### The Mission

"As long as there's a few farmers out there, we'll keep fighting for them."

- Willie Nelson

We grow enough food to feed every person on Earth - yet, every year, 1/3rd of that food goes to waste while millions of people go to bed hungry. The Farmlink Project is an innovative non-profit rescuing from the billions of pounds of fresh produce that would otherwise go to waste in order to feed people in need, reduce carbon emissions, and heal the planet. <u>https://thefarmlinkproject.org/about-us</u> **Impact** 

#### Over 9,000,000 meals delivered

The Farmlink Project has redistributed produce like potatoes, onions, zucchini, celery, carrots, and sweet potato along with milk, eggs, and salt from farmers to food banks serving families, health care workers, and senior citizens.

*Farmlink* (Continued)

#### **Our Partners**

We are proud to partner with our fiscal agent and advisor <u>Food Finders</u> (Tax ID#33-0412749), a 501c3 food rescue organization connecting donated perishable food to hundreds of nonprofit pantries and shelters throughout Southern California. We are also proud to team up with <u>Uber Freight</u> as part of their Move What Matters campaign to coordinate and transport food to those who need it most. We are grateful to work hand-in-hand with our partners and are excited for what more we can accomplish together.

#### General Information

#### How will my money be spent?

All proceeds are used to purchase produce to feed families and pay wages to farmers and truckers. We make sure to lift the financial burden off of farms and food banks, who do not have the resources to fund or arrange the transportation of produce, and provide economic relief for farmers and truckers, who are facing job instability due to COVID-19 closures. The farmers and truckers that we pay are *not* employees or team members of The FarmLink Project. All FarmLink team members are volunteers.

#### How is The FarmLink Project different from other initiatives?

According to Feeding America's national survey of affiliated food banks, 92 percent of food banks are seeing an increase in demand and 64 percent said food donations had declined. At the same time, many producers are having to waste millions of pounds of fresh produce due to difficulties shifting their supply chains and locating demand. The FarmLink Project's charitable mission is to fill a gap that will lead to thousands of underserved families receiving the produce they need in a time when they need it most.

#### Why should my business donate food through The Farmlink Project?

Rather than have farms and suppliers pay to dispose of surplus food, we pay the pick and pack out and transportation costs in order to distribute food to food banks. We do not compensate farmers for donated food. However, we help farms access tax benefits from federal and state governments for their food donation. Our Tax Benefits Tool helps farms estimate their tax savings and file the requisite forms and records.

#### Can you accept tax-deductible donations?

Yes! We are a new not-for-profit organization that is applying for 501(c)(3) tax-exempt status. As we await the receipt of our own tax-exempt status, we have sought fiscal sponsorship from <u>Food Finders</u>, a tax-exempt 501(c)(3) public charity. As our fiscal sponsor, Food Finders will accept donations made in support of The FarmLink Project, and then distribute to us those FarmLink-designated donations so we can pursue our shared charitable mission. Donations can be made <u>here</u>, and will be tax deductible to the extent allowable by law.

#### Where can I send a check?

Please make checks payable to "Food Finders" and write "The FarmLink Project" in the Memo. Please address envelopes as follows:

Food Finders (attention: The FarmLink Project) 10539 Humbolt Street Los Alamitos, CA 90720 A Potential New Weapon in the Fight Against COVID-19: Food Coloring

August 20, 2020 8.18am EDT Authors

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**Disclosure statement** 

The authors do not work for, consult, own shares in or receive funding from any company or organization that would benefit from this article, and have disclosed no relevant affiliations beyond their academic appointment.

# The big idea

Our biomedical engineering lab has developed a way to potentially neutralize viruses lingering in the air using aerosols of FDA-approved food coloring dyes. Aerosols are tiny bits of solid or liquid matter suspended in air.

Our idea was inspired by <u>photodynamic therapy</u>, which is a medical treatment, including for certain types of cancer. Photodynamic therapy uses a photosensitizer, a chemical that reacts with oxygen in the presence of light, to produce <u>oxygen free radicals</u>. These radicals are highly reactive, meaning they trigger other chemical reactions, including ones that kill harmful pathogens.

Instead of using expensive medical photosensitizers, we have identified several FDA-approved food coloring dyes that can be used to generate free radicals in visible light. We use ultrasound to generate small aerosols containing the food coloring so that the dyes can float and linger in the air. The aerosols are barely visible, and their small size and short lifespan in light means they don't stain surfaces. We used this technique to produce a device, Photodynamic Airborne Cleaner, that disinfects pathogens floating in the air. To the best of our knowledge, this is the first-of-its-kind photodynamic therapy aerosol generator for airborne disinfection.

A Potential New Weapon in the Fight Against COVID – 19: Food Coloring (Continued)

# Why it matters

Viruses and bacteria are often transmitted through the air. A person infected with SARS-CoV-2, the virus that causes COVID-19, who coughs or sneezes produces virus-containing droplets and aerosols that <u>float in the air and can cause infection</u>.

Due to this risk, all kinds of indoor gatherings are now limited. It is critical to be able to disinfect and sanitize large volumes of indoor air where many people are present to reduce the chances of transmission.

## What other research is being done in this field

Photodynamic therapy was first demonstrated as a <u>means of fighting</u> <u>bacterial infection</u>. Oxygen free radicals, specifically <u>singlet oxygen</u>, can also inactivate viruses by damaging the nucleic acids, proteins and lipids that they are composed of. In particular, singlet oxygen is effective at breaking down the lipid envelopes that form protective shells around many viruses. Most of the viruses that are harmful to humans, including SARS-CoV-2, have these envelopes.

Several other disinfection techniques are available, for example aerosolized hydrogen peroxide, hydrogen peroxide vapor, ozone, steam and UV-C or "deep UV" illumination. However, these are more appropriate for disinfecting surfaces than disabling pathogens floating in the air. Also, they can be hazardous to humans. For example, deep UV is commonly used as a disinfectant, but is carcinogenic.

### What's next

We are preparing to collaborate with a federal research team to evaluate the effectiveness of our Photodynamic Airborne Cleaner against airborne transmission of SARS-CoV-2.

Aerosols of FDA-approved food coloring dyes and their singlet oxygen generation do not last for a long time. These dye aerosols break down in light, and singlet oxygen is not generated without light. Nevertheless, even though the food coloring is FDA-approved for consumption, it's necessary to test the safety of potential inhalation and oral intake. Maple Leaf Extract Could Nip Skin Wrinkles in the Bud BOSTON, Aug. 20, 2018 — Maple trees are best known for their maple syrup and lovely fall foliage. But it turns out that the beauty of those leaves could be skin-deep — and that's a good thing. Today, scientists report that an extract from the leaves may prevent wrinkles.

The researchers are presenting their results at the 256<sup>th</sup> National Meeting & Exposition of the American Chemical Society (ACS). ACS, the world's largest scientific society, is holding the meeting here through Thursday. It features more than 10,000 presentations on a wide range of science topics. The scientists had previously studied the chemistry and health benefits of sap and syrup obtained from sugar maple and red maple trees. Historical records suggested that other parts of the trees could also be useful, according to Navindra P. Seeram, Ph.D., the project's principal investigator. "Native Americans used leaves from red maple trees in their traditional system of medicine," he notes, "so why should we ignore the leaves?"

Skin elasticity is maintained by proteins such as elastin. Wrinkles form when the enzyme elastase breaks down elastin in the skin as part of the aging process. "We wanted to see whether leaf extracts from red maple trees could block the activity of elastase," says Hang Ma, Ph.D., who is presenting the work at the meeting and is a research associate in Seeram's lab.

The researchers, who are at the University of Rhode Island, zeroed in on phenolic compounds in the leaves known as glucitol-core-containing gallotannins (GCGs) and examined each compound's ability to inhibit elastase activity in a test tube. The scientists also conducted computational studies to examine how the GCGs interact with elastase to block its activity, and how the molecules' structures affect that blocking ability. Maple Leaf Extract Could Nip Skin Wrinkles in the Bud (Continued)

GCGs containing multiple galloyl groups (a type of phenolic group) were more effective than those with a single galloyl group. But these compounds can do more than interfere with elastase. In prior work, Seeram's group showed that these same GCGs might be able to protect skin from inflammation and lighten dark spots, such as unwanted freckles or age spots.

Seeram and Ma plan to do further testing. "You could imagine that these extracts might tighten up human skin like a plant-based Botox<sup>®</sup>, though they would be a topical application, not an injected toxin," Seeram says. And the fact that the extracts are derived from trees would be appreciated by consumers who are looking for natural, plant-based ingredients in their skincare products.

The researchers have taken steps to get the extracts into products, having developed a proprietary patent-pending formulation containing GCGs from summer and fall maple leaves and maple sap, which they named Maplifa<sup>TM</sup> (pronounced "mape-LEAF-uh" to reflect its origin). They have licensed it to botanical extracts supplier Verdure Sciences based in Indiana and are hoping to eventually find a market for the formulation in the cosmetics sector or even in dietary supplements.

If these products come to fruition, the team's findings could benefit the local economy. "Many botanical ingredients traditionally come from China, India and the Mediterranean, but the sugar maple and the red maple only grow in eastern North America," Seeram says. Farmers in the region, who currently only harvest sap from the maple trees, could tap the leaves as a value-added product for an additional source of income. Even better, the process would be sustainable because leaves could be collected during normal pruning or when they fall from the trees in autumn.

The researchers acknowledge support and funding from the <u>University of</u> <u>Rhode Island</u> and <u>Verdure Sciences</u>.

# Chilled Blueberry Soup

Ingredients:

2 cups water
1 pint blueberries
1/2 cup sugar
1 lemon, juiced
1 cinnamon stick
1 cup sour cream or plain yogurt

Combine water, blueberries, sugar, lemon juice, and cinnamon stick in a medium sauce pan. Bring to a boil then lower heat and simmer for 15 minutes. Remove cinnamon stick. Transfer soup to a blender (or blend with a hand blender) and puree until smooth. Whisk in sour cream. Chill and serve garnished with sour cream and blueberries.

Serves 6.



The results appeared online June 30 in the American Journal of Cardiology.

Meditation was Linked to Lower Cardiovascular Risk in a Data Analysis by Veterans Affairs Researchers and Colleagues

Previous studies have suggested that meditation may have beneficial effects on a number of conditions. A 2017 American Heart Association scientific statement suggests that meditation may be of benefit for cardiovascular risk reduction. Data show that it may help with blood pressure, cholesterol level, quitting smoking, and overall cardiovascular health. However, this connection is far from definitive. By using a large national database with many participants, the authors of the new study sought further evidence on how meditation impacts cardiovascular risk.

Lead researcher Dr. Chayakrit Krittanawong -- of the Michael E. DeBakey VA Medical Center, Baylor College of Medicine, and the Icahn School of Medicine at Mount Sinai -- and his colleagues studied data from the National Health Interview Survey, conducted annually by the National Center for Health Statistics. It collects information on a wide range of health topics from a nationally representative sample.

The researchers looked at data on more than 61,000 survey participants. Of those, almost 6,000 (nearly 10%) said they participated in some form of meditation.

The researchers found that people who meditated had lower rates of high cholesterol, high blood pressure, diabetes, stroke, and coronary artery disease, compared with those who did not meditate.

The greatest difference was in coronary artery disease. Those who meditated were 51% as likely as those who didn't to have the disease. The prevalence of other cardiovascular risks in the meditation group compared with the non-meditation group was 65% for high cholesterol, 70% for diabetes, 76% for stroke, and 86% for high blood pressure.

The researchers controlled for other factors connected to cardiovascular risk, such as age, sex, cigarette smoking, and body mass index. After adjusting for these factors, the effect of meditation was still significant.

Many types of meditation exist. Most focus on attention and awareness. Meditation has been shown to increase physical and mental relaxation. "I believe in meditation, as it can give us a sense of calm, peace, and stress reduction, leading to improvement of our emotional well-being," explained Krittanawong.

Practicing meditation has been linked to decreased stress, greater mindfulness, and improved psychological health. It may even lead to longterm functional and anatomical changes in the brain. Meditation is also simple, cost-effective, and low-risk. Meditation was Linked to Lower Cardiovascular Risk in a Data Analysis by Veterans Affaird Researchers and Colleagues (Continued) Krittanawong and colleagues did note several limitations to the study. First, the survey did not capture what type of meditation people were using. Some types of meditation may offer more cardiovascular benefit than others, say the researchers. The survey also did not ask about the duration or intensity of that meditation. It is possible that those who practice longer and more frequently will get more benefit, but the study cannot measure these effects.

Also, the researchers cannot definitively say that meditation directly decreases cardiovascular risk. It could be that people who are in better cardiovascular health to begin with are more likely to practice meditation, rather than the other way around.

Other life activities might also obscure the link between meditation and cardiovascular health. The researchers found factoring in alcohol consumption and physical activity lowered the significance of the relationship between meditation and cardiovascular risk.

Considering all these factors, the researchers concluded that meditation is "probably" associated with lower prevalence of cardiovascular risk. Krittanawong notes that, while the results suggest that meditation can improve cardiovascular health, "we would need a powerful study such as a clinical trial to determine whether meditation could benefit cardiovascular health in veterans."

Meanwhile, the study adds to a growing body of research on the potential benefits of meditation, they say.



Marty Sigel, a 77-year-old Navy Veteran, tries out some meditation on a July day in Baltimore. New research has added to the evidence on the cardiovascular benefits of meditating. Credit: Mitch Mirkin Marty Sigel, a 77-year-old Navy Veteran, tries out some meditation on a July day in Baltimore. Credit: Mitch Mirkin

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