

Person & Planet

P u r e v a n t L i v i n g



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WELCOME

Person & Planet by Purevant Living is a publication that shares all things good within sustainability and wellness including articles, company highlights, new product development, organizations, public policy, wellness and eco tips, recipes, artwork, and photography.

This publication is a valuable resource for businesses and consumers alike, to educate readers on sustainable solutions for the planet and personal health.

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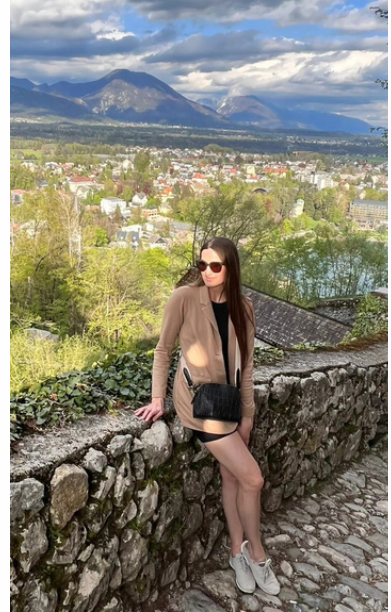
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LETTER FROM THE EDITOR

Dear Reader,

Thank you for caring about person and planet, for spending some time familiarizing yourself with some of the recent advancements and success stories in sustainability, and education and tools available for your personal wellness journey. This fourth issue of Person & Planet by Purevant Living explores initiatives that have the potential to positively impact your life and the surrounding environment, providing encouragement to participate in actionable steps to contribute on any scale and on any level for both personal and professional life.

Since your wellness and the health of our planet are intimately connected, we hope to encourage healthy choices and ethical decisions, also sharing inspirational eco art and nature photography.



To do our part, we have a new partnership for 2023 to offset our emissions, with Tradewater, an organization that safely destroys and removes hazardous non-CO₂ gasses like halocarbons and methane. This method we feel is one of the most impactful ways to reduce greenhouse gas emissions and fight climate change. We're so thrilled about this partnership, to also help other companies, small businesses, freelancers or even households offset their exact emissions, in an affordable and an inclusive manner, to provide everyone the opportunity to participate in positive change. In addition, we complete the Green Masters Program for the Wisconsin Sustainable Business Council each year, and have a commitment to donate 2% of every sale via monetary donations and pro bono work. This year we selected Lake Country Clean Waters in Wisconsin as our nonprofit pro bono recipient. Through these actions we are able to offset our annual carbon footprint from all operations. We now offer this publication free in digital format and currently print on demand via Amazon as the most carbon friendly option for this publication, but plan to print more sustainably as the publication grows. Please enjoy and share this fourth edition!

Thank you for caring about person and planet,

Stephanie Krubsack

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Grand Haven, Lake Michigan.
Photography by Chris Slonske.



GREAT LAKES BUSINESS NETWORK

GREAT LAKES BUSINESS NETWORK

by Lisa Dinon; photography by Beth Price

The Great Lakes Business Network (GLBN) brings together 200 businesses from across the Great Lakes Region to advocate for thriving ecosystems, economies, and communities. A non-partisan, fact-based advocacy coalition, the GLBN is uniquely positioned to elevate business voices and bring together leaders across Great Lakes industries to speak for the importance of fresh water resources and the communities and economy that rely on clean water. Many entrepreneurs are frustrated their businesses are misrepresented as caring more about profit than protecting the environment. The GLBN counters this narrative, with a robust network of owners who believe companies should be part of the solution.

The GLBN formed organically in 2017 when a group of businesses in Northern Michigan joined forces to raise concerns about the Line 5 pipeline in the Straits of Mackinac.

Line 5 pumps 23 million gallons of oil and natural gas liquids along the bottom of the Straits of Mackinac each day, where Lakes Huron and Michigan meet. The 69-year-old pipeline was designed for a 50-year lifespan and has never been in compliance with the original easement agreement. Great Lakes business leaders rightfully identified this pipeline as a threat to the Great Lakes, our drinking water, wildlife, and \$65 billion annual blue economy. The GLBN played an essential role in elevating this issue as a priority for decision makers, including Governor Whitmer who revoked the operating easement Enbridge Energy had with the State of Michigan to shut down the pipeline in late 2020.



*Photo by Beth Price

Despite this revocation, Enbridge continues to operate Line 5, perpetuating the risk to Great Lakes businesses and communities. Enbridge itself directly and irrefutably contradicts their own claims of dire consequences from a Line 5 shutdown. Enbridge's own expert, Neil Earnest, in his expert report submitted in the Bad River Band trespass case, concluded: "The estimated impact of a Line 5 shutdown on Wisconsin and Michigan gasoline, jet fuel, and diesel prices **is an increase of 0.5 cents per gallon.**" That conclusion is worth repeating: **Enbridge says that shutting down Line 5 will raise prices at the pump by only one-half of one cent per gallon.**

But regardless of Enbridge's economic claims (false or not), they have an ongoing trespass in Michigan and on the Bad River Band's reservation. Their illegal operation of Line 5 – along with their legal attacks to try and keep the pipeline pumping – are an attack on state and Tribal sovereignty to protect and govern water and land.

Instead of legal attacks on citizen rights, Enbridge should be engaging in meaningful conversations about an orderly shutdown of Line 5. All decision makers agree that Line 5 should have never been constructed or put in the Great Lakes. Seventy years later, we're facing a global climate emergency where a fossil fuel transition effort needs to be greatly accelerated. Instead of being a part of that solution, Enbridge is proposing to prolong this vintage pipeline by blasting and drilling an oil pipeline tunnel under the Great Lakes and expanding Line 5 around the Bad River Band's reservation, but still directly in their treaty protected waters. The GLBN calls on Enbridge to stop attacking Tribal and state rights, land and water and instead come to the table and participate in the orderly shut-down of Line 5.

The same passion that mobilized businesses to form the GLBN continues to fuel Network advocacy years later. While Line 5 remains an important issue campaign for the GLBN, members are also working to build a robust clean energy economy and mitigate harmful algal blooms in Lake



Erie and across the Great Lakes region. The GLBN equips business leaders with resources to become leading protectors of the Great Lakes region and economy and creates opportunities for them to create policy change. On any given day, you will find members of the GLBN meeting with legislators, publishing op-eds and letters to the editor in top regional news outlets, corresponding with regional decision makers on Great Lakes priorities, participating in webinars for continuing Great Lakes education, networking, collaborating, and building a community of diverse Great Lakes champions. The GLBN gives business leaders the power to grow their business's conservation footprint and to be an advocate and leader for the environment. Sound like a business you know? To learn more or join our network, visit GLbusinessnetwork.com

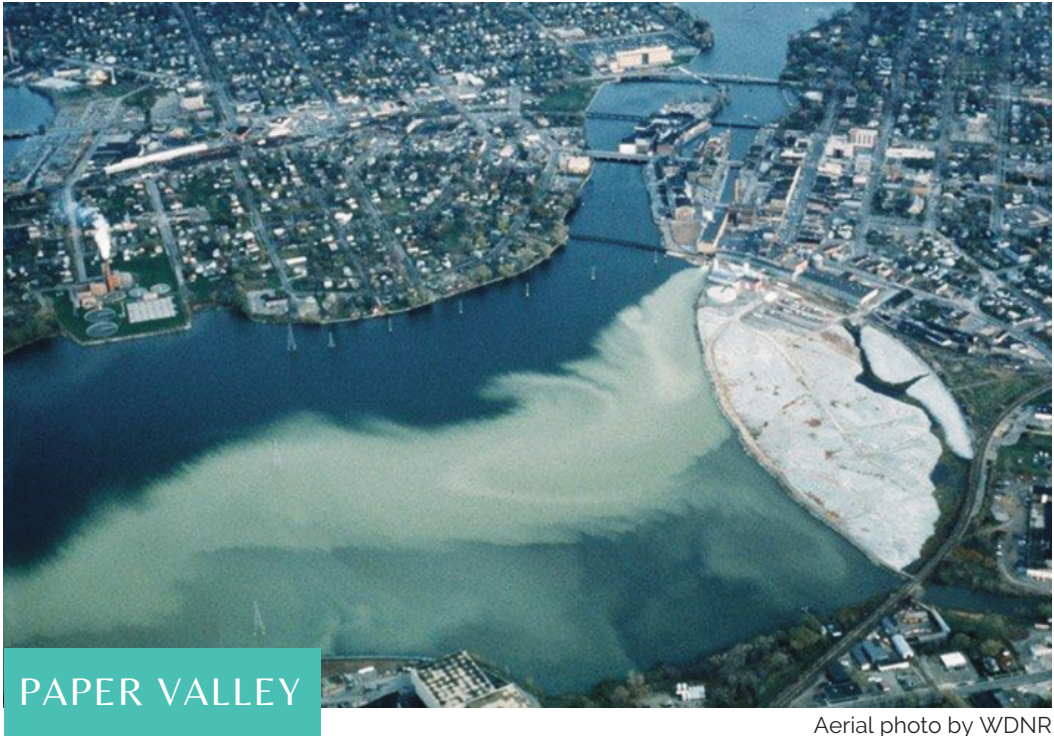
I'M SORRY MS JACKSON, I AM FOR REAL
I JUST WANT TO BUY MY GROCERIES
PLASTIC FREE IS WHAT FOOD'S SUPPOSED TO BE



Art As Activism, by Brenna Quinlan, illustration.



Spring Lake, Michigan.
Photography by Chris, Slonske



Aerial photo by WDNR

FIX THE FOX: THE RECORD BREAKING PAPER VALLEY PCB CLEANUP

by Stephanie Krubsack; photography by Ken Stromborg

How northeast Wisconsin arrived at a place where the Fox River and Bay of Green Bay in Lake Michigan was cleared of hazardous PCBs in a \$1.3 billion effort is a complicated matter, best told from the perspectives of the former Assessment Manager of the U.S. Fish and Wildlife Service, David Allen and Green Bay Press-Gazette Environmental Reporter, Susan Campbell.

To put this monumental effort into perspective, the above is considered the world's largest environmental river cleanup of PCB contamination and one of the largest Superfund efforts since the Exxon Valdez oil spill in 1989. A Superfund¹ is a law that basically allows the EPA or Environmental Protection Agency to have federal authority to take action when hazardous pollutants or substances are released into the environment that threatens the wellbeing of the general public.

David Allen stated, "Superfund law is broader and powerful than most people realize."² In this instance, over 6.5 million cubic yards of PCBs-contaminated sediment was removed from the riverbed of the Fox River. For Green Bay Packers enthusiasts, this is equivalent to filling Lambeau field to the top 6 times!



Authors and activists David Allen and Susan Campbell recently released their book called, "Paper Valley The Fight For The Fox River Cleanup" and moderated a panel discussion in June in Green Bay where it all began. Wisconsin's Department of Natural Resources officially announced that the project was closed in January of this year.

For more background on the contamination, paper companies started releasing PCBs into the Fox River directly from the paper mill pipes, and it was not until the Clean Water Act of the 1970's that the practice was outlawed. By that time

the damage had been done, and high levels of PCBs were embedded in the river sediments, reaching far across the Bay of Green Bay and into Lake Michigan. According to David Allen, "From the late 1950s through the '70s, some mills were discharging hundreds of thousands of pounds of an odorless, invisible group of far more worrisome compounds. These toxic chemicals – known as polychlorinated biphenyls or PCBs – were discharged to the Fox river by the manufacture or recycling of carbonless copy paper." During the panel discussion Allen further clarified that the coating from this type of paper produced at Appleton Papers, went into waste treatment where the water was poorly treated and later sent directly into the river. A second source of PCBs came from stripping off coating from NCR papers that went out the pipes and into the river. Even further, "Congress banned the production of PCBs in the 1970s, citing concerns about their cancer-causing

properties."² Allen and colleagues performed countless tests and analysis of fish and wildlife in and around the affected waters, discovering countless deformities, decreasing populations, and more concerning evidence. Farther north on the bay on Hat Island, one such species of bird called the double-crested



'Cross-billed cormorant' by Ken Stromborg

cormorant was found,

often referred to as the 'cross-billed cormorant' because of extreme beak deformities found on many from exposure to PCBs. In fact, one in twenty of the local cormorant birds had such deformities.

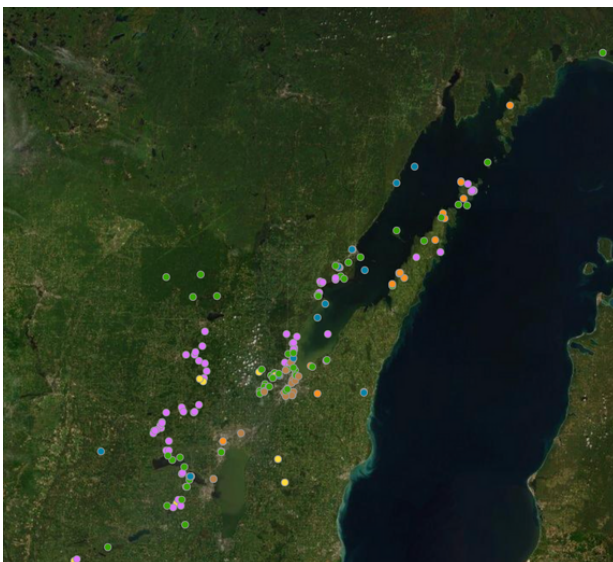
Not only was there growing concern for the local wildlife, but local residents as well. During the panel, Jim Hahnenberg, the former Remedial Project Manager for the Fox River, U.S. EPA, shared that the main human risk of PCBs is from consuming the affected fish from these waters. PCBs were known to potentially cause cancer, and if women consumed fish with PCBs it could affect their children in numerous ways including decreasing their IQ and other potential hazards. The levels of PCBs also varied by the type of fish, where catfish and bottom feeders carried higher levels of PCBs. In the area, ethnic communities frequented the local waters for fish for their families, not acknowledging the signage or verbal warnings, not realizing that PCBs were present in the seemingly normal looking waters.

According to a release by the Department of Health & Human Services, "In 1976, the Wisconsin Department of Health and Social Services and Department of Natural Resources issued fish consumption advisories on the Lower Fox River, Green Bay, and Lake Michigan."³ During the panel, Susan Campbell also noted the concern for ethnic communities that rely heavily on fish, about the lack of signage in their native language. It is important to note that signage did not appear at fishing locations on the Lower Fox River in other languages including Spanish and Hmong until 2000. Campbell also brought up another important fact, that many ignored fish advisories, and many women who were cooking, not catching the fish never saw these advisories when men would bring the fish home and they'd prepare it unknowingly.

The Department of Health & Human Services report also shared that a study in 1997 indicated that, "Sixty percent of women were unaware of the advisories while only forty percent of men were unaware. Likewise, only twenty-two percent of minority anglers were aware of the advisories compared to fifty-two percent of white anglers." ³

To highlight the far reaching impact of PCBs Allen shared, "A single ounce of PCBs was enough to contaminate thousands of Olympic-sized pools above safe levels for fish, wildlife, and people." ² However, with the completion of the massive cleanup effort there is hope to continue to restore the Fox Valley and Bay of Green Bay to its pre-PCB era. During the Person & Planet Podcast interview, Allen stated, "By removing the PCBs from the river sediments and by capping the ones that have remained behind we have turned off the PCB spigot from the river to the entirety of Green Bay." ⁴ The great majority of the PCB-contaminated sediment in the Fox River was either removed or is now safely contained under caps to prevent it from escaping into the waters and moving downstream. To this day, several organizations are committed to the long term recovery of this ecosystem.

Be sure to visit papervalley.org or read the book, "Paper Valley The Fight For The Fox River Cleanup" to learn about the intricate details of the Superfund case and the different agencies at play during one of the most record breaking environmental efforts of our time.



Northeast Wisconsin Restoration sites by USFWS

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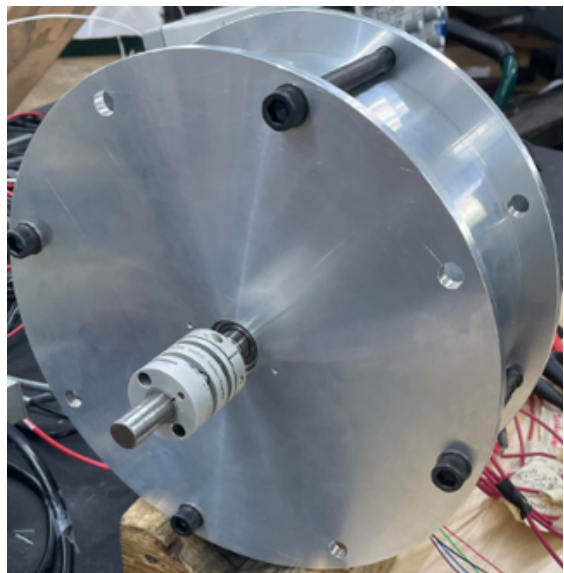
Empire, Michigan.
Photography by Chris Slonske.

THE UNCOMFORTABLE TRUTH ABOUT EV'S, AND HOW TOREV MOTORS IS FIXING IT

by Rory Brogan, Founder and CEO of Torev Motors

Earlier this month, China announced ¹ its newest wave of export restrictions. This time, it restricted exports of two rare earth metals, gallium and germanium, which are used in computer chips and other technologies. But computer chips aren't the only products that are susceptible to volatility caused by these trade disagreements - so are electric vehicles.

As the world looks for ways to combat carbon emissions and extreme climate change, addressing transportation is key. Electrification is here, and nearly every single major car maker ² has announced plans to go partially or fully electric. This is a monumental shift in one of our largest and most successful industries. It is also one that must be made, as transportation is the single largest carbon emitting industry in the US, accounting for 28% of all US emissions, ³ according to the EPA. However, now that we are finally making the switch, we have been confronted with the uncomfortable truth about EVs: they, too, are far from perfect when it comes to environmental



impact and sustainability. Make no mistake - EVs are better ⁴ for the environment than cars powered by fossil fuels and we must electrify our country's transportation infrastructure. But that doesn't mean there aren't serious problems with the EV supply chain, both from an environmental point of view and from an economics and trade perspective. That's where Torev Motors steps in. We are addressing the problems now being recognized in EVs in two key ways: reducing the need for rare earths,

and reducing carbon emissions through a more efficient motor.

First off, EVs rely heavily on rare earth metals. Now, when we think about EVs, most people think about batteries and with good reason, as those are the biggest and most expensive part of an EV. Most people also know that EV batteries often rely on lithium. But as demand for EVs explodes, it's equally critical to consider the materials in our motors. After all, a car needs both to drive down the road.

In the case of EV motors, they also rely heavily on a certain, lesser-known rare earth metal: neodymium. Neodymium isn't as famous as its lithium counterpart. It's hard to say and you may never have heard of it, but it is all around us. It is used in all sorts of technology products, from phones to laptops - to motors, and there's a very good reason for that: it is the basis of very strong permanent magnets, which are crucial for all sorts of electronics, including high efficiency electric motors.

The problem is that neodymium comes with a problematic environmental impact and a messy supply chain. It is a supply chain that is overwhelmingly dominated by one country - you guessed it: China. China controls about 90%⁵ of the world's



processing of neodymium. As the world's gatekeepers to this precious resource, China has a huge and outsized influence on who gets access to neodymium, and at what price. China is aware of this and, as the world accelerates toward electrification, is likely to continue utilizing this supply chain offensively to expand its global influence, as it has in the past.⁶ Perhaps put best⁷ by Deng

Xiao-Ping in 1992, "The Middle East has oil. China has rare earth metals."

In addition to the geopolitical and supply chain risk associated with nearly all of the world's neodymium supply being controlled by one country with an increasingly adversarial relationship with the US and Western countries, neodymium also causes environmental problems. As the mining and processing of the metal creates ⁸ radioactive, toxic waste as a byproduct and is highly intensive in carbon emissions. (Now you may be asking, why don't they just make an EV motor with no neodymium? It's not a bad idea in theory and certainly motors exist that use no rare earths or even permanent magnets. The problem with this in practice is that motors that eliminate the metal tend to become larger, heavier, and less efficient. Even ferrite magnet motors of comparable efficiency face challenges from their, at times, elevated environmental impact. ⁹ These are pretty big problems when you are putting a non rare earth based motor into an EV and it's why, up until now, motor manufacturers have struggled to reduce or remove the metal from their motors.

This is where Torev Motors is radically different. We can reduce the rare earth metal content in EV motors by 50%, and we do it without sacrificing efficiency. We achieve this through a patented, first-of-its-kind motor design dubbed the double axial flux motor, which sits right at the intersection of sustainability and efficiency. Now the term "double axial flux" is a lot of engineering jargon, but it essentially boils down to a motor that more closely resembles a pancake and has two coils instead of one on the same back iron.

More importantly, this design enables us to double the amount of motors for the same amount of rare earth metals while allowing EV drivers to travel further and recharge less frequently.

But rare earth metal reduction isn't the only way our technology helps the environment. We can also help in significantly reducing carbon emissions. Since our motors mean more range and less charging of EVs, we reduce the amount of carbon emissions associated with the energy consumption of charging devices, which can account for 50-80% ¹⁰ of EV-related emissions. Our motor also cuts in half the need for the carbon-intensive mining and processing of these rare earth materials. All together, we can reduce both rare earth use and carbon consumption-related emissions.

The future of transportation is here, and it is electric. But there is still much to do if we are to successfully transition by 2035. If you, or someone you know, is interested in making an impact and accelerating sustainable electrification, please don't hesitate to reach out. In the meantime, we'll keep working to change the world, one motor at a time.

Torev Motors is a startup in Arlington, Virginia that specializes in creating the next generation of electric motors for the transportation space. To learn more about Torev, please visit torevmotors.com or reach out directly to Rory Brogan at rory@torevmotors.com

Sources:

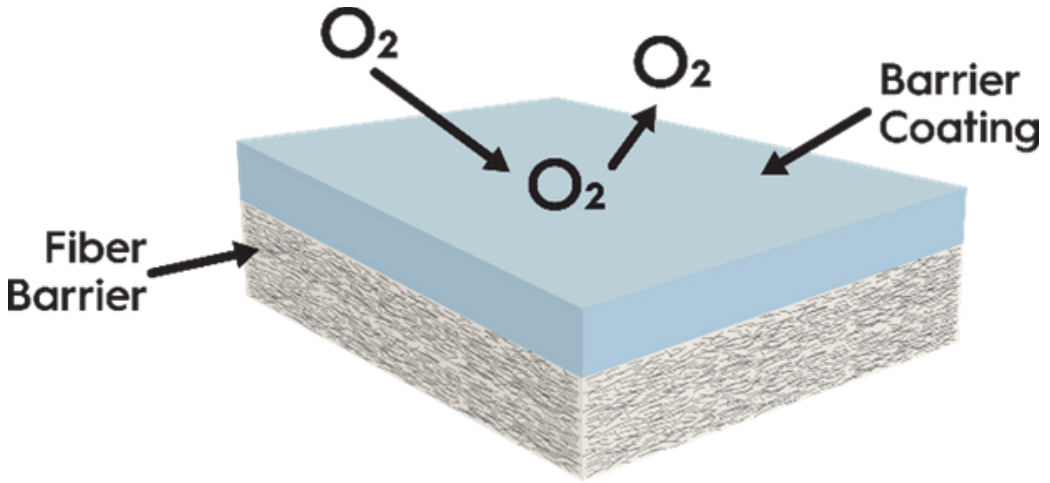
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Chapel Rock at Pictured Rocks National Lakeshore, Munising, Michigan.
Photography by Chris Slonske.

CONSIDERING PAPER AS A FULLY FUNCTIONAL PACKAGING SOLUTION

by Addie Teeters



Oxygen Barrier

Paper is an ideal material for flexible packaging applications, and already has a broad field-of-use from good flexibility and folding characteristics to printability. Paper is easily sealable and glueable, laminating well to other structures. In addition, paper functions effectively through challenging converting processes.

Ahlstrom, a global leader in fiber-based materials, is continuing their journey of utilizing paper-based substrates to form fully functional packaging solutions that replace non-renewable packaging such as traditionally used fossil-based plastics and films. Ahlstrom's purpose: to Purify and Protect, with Every Fiber, for a Sustainable World. Fibers and fiber-based packaging are at the core of what Ahlstrom does every day, and they are the common denominator of their products and solutions. While Ahlstrom already utilizes fibers to produce a wide range of products for food packaging, ecommerce, highly specialized products, and diagnostic tools – this is only the beginning of the innovation journey. Ahlstrom is continuously developing new fiber-based solutions that are important contributors to a better, more sustainable, and brighter future.

Small fibers can make a big difference, and a key focus area remains on utilizing fibers and other renewable materials to develop replacement solutions for current non-renewable packaging such as plastics and films.

Paper – The Ideal Material for Flexible Packaging

Ahlstrom continues to advance its base paper development to achieve the barrier properties fundamental to unlocking the sustainability benefits paper brings to flexible packaging applications. Base paper development and optimization, which dramatically improves paper performance in barrier properties, can be achieved in several categories simplified to three key elements:

- Paper Making Process – Pulp and Fiber Selection, Paper Forming, and Processing
- Mechanical Treatment – Refining and Densification
- Surface Treatment– Sizing for water barrier, pre-coatings for oxygen and water barriers, and the solubilization of cellulose itself

The Concept of Barrier Technology

The majority of flexible packaging solutions require barrier properties to function and preserve our food. The primary requirements for these applications are typically oil and grease barrier (OGR – oil & grease resistance), oxygen barrier (OTR – oxygen transmission rate), and moisture barrier (MVTR – moisture vapor transmission rate). These barrier properties are not inherently present in paper structures, but by engineering the production processes and additives used, paper can exhibit these properties and enable barrier coatings to work more effectively.

Oxygen Barrier

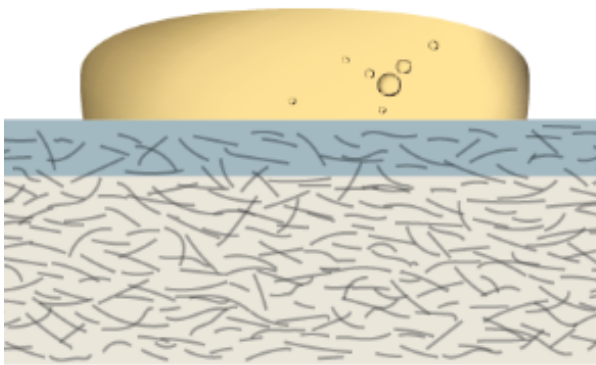
“Paper substrates can be engineered to exploit the inherent value of cellulose itself,” explained Zack Leimkuehler, Vice President Business Development for Ahlstrom. “Cellulose by itself is a very good oxygen barrier, and highly developed base papers can deliver the oxygen barrier properties.”

Ahlstrom's Genuine Vegetable Parchment (GVP) technology, one of the original forms of oxygen barrier in a fiber-based substrate, dates to the 1840s. During “parchmentization,” portions of the fiber in a paper web are chemically solubilized. This solubilization process creates a film of pure cellulose which is integrated throughout the web of fibers. This film of cellulose provides some of the highest

barriers to grease and oil and takes advantage of the properties of pure cellulose creating oxygen barrier. Parchmentization is ideal for solutions that require compostability, both industrial and backyard certifications.

Oil & Grease Barrier

The processing of cellulose in papermaking can develop inherent oil and grease barriers without the use of traditionally used fluorochemicals (PFAS), and such technology enabled Ahlstrom to develop proprietary FluoroFree® papers more than a decade ago.



This barrier to oil and grease can also provide mineral oil (MOSH/MOAH) barriers. Furthermore, base papers can be engineered to extend the functionality and degree of performance of barrier coatings.

High degrees of mechanical treatment, also referred to as refining, create a highly networked structure of the fibers themselves. This high degree of refining breaks down the individual fibers into micro-portions enabling increased fiber-to-fiber bonding and creating

a non-porous material which is naturally grease and oil resistant, but still recyclable.

Moisture Barrier

Although paper traditionally absorbs moisture and water, it can be enhanced to enable the functionality of barrier coatings which provide water and moisture barriers. Ahlstrom has developed papers to provide short to midterm water resistance through surface treatments combined with base paper technology.

This water resistance can improve the packaging performance by itself. Additionally, this water resistance can extend water-based coatings for improved performance by either keeping the coatings on the surface where their performance is maximized, or by minimizing the amount of the coatings needed to help ensure recyclability or compostability of the final structure. This functionality means very challenging applications can be achieved, and the addition of barrier coatings to this type of structure can add multiple layers of benefits in a single structure. "This "layering" of benefits is critical to provide a base paper with the right functional

advantages to enable low levels of MVTR (high moisture barrier)," Leimkuehler further explained. "By utilizing the competencies of water resistance, mechanical refining and densification, and the natural oxygen barrier of cellulose itself, a very robust base paper can be produced which enables paper to achieve the goals of these applications and create true sustainability value."

Additionally, this extension of performance can be applied to other functionality like heat-sealing which is critical to performance of flexible packaging substrates. The highly engineered base paper can enable lower coat weights of heat-seal coatings helping to ensure end-of-life goals can be met.



Heat Seal

Fiber – The Sustainable Solution

Ultimately, paper and fiber-based packaging possesses ideal sustainability benefits – broadly recognized as recyclable and can be designed for compostability (both backyard and industrial). Paper-based flexible packaging is produced from a biobased material that is renewable and promotes healthy management of forests.

To remain informed about Ahlstrom's BoundlessBarriers™ technological advances, visit: <https://bit.ly/BoundlessBarriers>

Sources:

1. Bio-Based Packaging: Materials, Modifications, Industrial Applications and Sustainability | <https://www.mdpi.com/2073-4360/12/7/1558/htm>



Manistee North Pierhead Lighthouse in Manistee, Michigan.
Photography by Chris Slonske.

CAN YOU SPARE SOME CHANGE?



Art As Activism, by Brenna Quinlan, illustration.

CLIMATE IMPACTS TO WISCONSIN'S WETLANDS

by Dea Larsen Converse, Communications Director,
Wisconsin Initiative on Climate Change Impacts



A focus on climate impacts to water resources in Wisconsin from the Wisconsin Initiative on Climate Change Impacts (WICCI) ¹ shows that warming temperatures and changing precipitation patterns are impacting Wisconsin's wealth of water resources, including wetlands. The last two decades have been the warmest on record in Wisconsin and the past decade has been the wettest.

Average precipitation and extreme storm events that deliver large amounts of water in short periods are increasing in Wisconsin, resulting in flooding and water quality problems. Flooding during large storms causes damage to infrastructure,

habitat loss, and risks to human health. Fast-flowing water also increases erosion and can cause deep channels to form that intensify the flow of stormwater. These channels further reduce flood storage, degrade water quality, and increase downstream flooding. Areas with permeable soils where the water table is near the surface, like shorelines of seepage lakes and wetlands, can experience long-term

“The warming climate is having an impact on water resources in Wisconsin. We need to increase the magnitude and urgency of actions to protect and restore habitat and enhance water quality to make Wisconsin's waters more resilient to climate change.”

**– Katie Hein, WICCI
Water Resources
Working Group
Co-Chair**

rises in groundwater during periods of higher-than-average precipitation, resulting in damage to vegetation and property.

Major climate impacts to wetlands include changes in hydrology, increased sediment and nutrient loads, invasive species, and shifts in plants and natural communities. These climate changes are in addition to a variety of stresses to wetlands in Wisconsin, including the loss to farm drainage and filling of about half of the wetlands that were present in 1948. While this conversion has slowed, wetland loss continues through degradation by invasive plants and insects, loss of groundwater, and increased changes in land use.



Wetland professionals and foresters have also noticed a negative feedback loop between a wetter climate, the emerald ash borer (an invasive insect), and changing agricultural land use practices. The loss of ash trees to the emerald ash borer reduces transpiration (water loss) from the ecosystem and, along with extreme rain during the growing season, raises the water table. Farmers are also tiling more and more ground, funneling precipitation into adjacent wetlands and adding even more water to the system. Water is so high in some ecosystems that it is causing the



death of even the most flood-tolerant species like silver maple. The result is a rapid conversion from a hardwood swamp to shrub swamp or reed canary meadow.

Yet, there is hope. The WICCI report suggests solutions to prepare for and minimize climate impacts to water resources, including protecting and restoring riparian areas, floodplains, and wetlands throughout the watershed. Visit the Water Resources Working Group webpage ² to learn more. There is hope for the future, but it is up to us.

WICCI is a nationally recognized collaboration of scientists and stakeholders working together to help foster solutions to climate change in Wisconsin.

Sources:

1. Wisconsin Initiative on Climate Change Impacts, <https://wicci.wisc.edu/>
2. Water Resources Working Group webpage, <https://wicci.wisc.edu/water-resources-working-group/>



Walensee, Switzerland.
Photography by Stephanie Krubsack.

ENABLING SUSTAINABILITY WITH MONO-MATERIAL FLEXIBLE PACKAGING

by Ken Brunnbauer, Marketing Manager, Glenroy, Inc.



If you're familiar with flexible packaging (i.e. spouted pouches, stick packs, sachets, zipper pouches, etc.), you'll know that it's traditionally challenging to recycle. The main reason relates to flexible packaging's multilayer plastic structures and the difficulty separating the various materials used in each layer at recycling facilities. Because of this traditional approach to flexible packaging,¹ it had been commonly thought of as "hard to recycle". However, with the rise of consumer awareness and the commitment by brand owners to meet sustainability goals by 2025 or 2030, the tide is changing within the flexible packaging industry. It's time to start viewing flexible packaging as a sustainability enabler and as a resource, not waste.

According to the article *Creating a Circular Economy for Plastics* by Nicola Ledsham, "Society needs to stop thinking of plastic as 'waste,' but as a renewable resource that needs to be disposed of correctly." ²

The beauty, and value, of flexible packaging has always been its ability to protect the product that is inside. By minimizing oxygen and moisture contact with the product inside, flexible packaging has the ability to extend shelf life and preserve freshness to enhance the consumer experience. These attributes alone help to reduce food spoilage and decrease the amount of food waste in our landfills. In addition, its lighter weight when compared to glass and rigid plastic, enables it to reduce the gross weight during shipping which reduces greenhouse gas emissions and fossil fuel use. And the production of flexible packaging is much less energy intensive than other forms of packaging, and it uses less water too.

Wait, you said "sustainability enabler" earlier? But it's made of plastic. Yes, that is accurate. However, the way that flexible packaging is being constructed now vs. the past is vastly different. Enter, the rise of mono-material flexible packaging. Mono-material flexible packaging is still a multi-layer structure, with the barrier protection of traditional flexible packaging, but instead of using different materials for each of the layers, it uses only one material type for each layer. In the United States, polyethylene is the material type gaining the most momentum. By constructing flexible packaging film and pouches with a single material type (polyethylene) it is proving to be a pathway for flexible packaging to be recycled, or repurposed. This is providing the driver (or enabler) for brands to add mono-material flexible packaging formats to their portfolio that provide the product protection they need and help enable them to reach their stated sustainability goals (including plastic reduction and recyclable materials) in the coming years.

The recycling and repurposing programs for flexible packaging are accelerating the realization of a true circular economy. The circularity part of "circular economy" is one where the amount of plastic produced in the first place is reduced by continually reusing materials already in use, in a continuous loop. Awareness and education on these programs are actions that mono-material flexible packaging producers, like Glenroy and our counterparts in the industry, are striving to achieve every day. Programs like the Sustainable Packaging Coalition's How2Recycle program ³ provides clear labeling for consumers, so they know how to properly recycle the mono-material flexible packaging they use. The store drop-off

component of the How2Recycle program allows consumers the ability to drop their empty, clean, and dry mono-material flexible packaging into the bins outside retailers throughout the US. Those empty packages are then sent out to be made into composite lumber, decking, or even recycled into another plastic bag. One of the recipients of the mono-material flexible packaging collected in the store drop-off bins is Trex.

Since 1996 Trex has grown to the world's largest manufacturer of wood alternative products. Through their NexTrex program⁴ they have expanded their reach by



working directly with communities and companies to specifically identify mono-material flexible packaging that gets sent directly to Trex for recycling and repurposing flexible packaging into their catalog of products, further enabling the circular economy.

Expanding consumer education and awareness will be key elements in the advancement of mono-material flexible packaging and its ability to drive the

circular economy. Organizations like the Flexible Packaging Association, Sustainable Packaging Coalition, Association of Plastic Recyclers, and others work with all stakeholders that have a vested interest within the flexible packaging industry (from converters to brand owners to consumers to recyclers to government).

They are continually working with each stakeholder on educational programs and activities to increase the collective knowledge and understanding of the holistic sustainable benefits of mono-material flexible packaging, and to stay engaged with law makers to ensure that the legislation being proposed is consistent and easy to follow.

The Flexible Packaging Association released their Extended Producer Responsibility (EPR) Basics⁵ overview to demonstrate their educational work with producers, consumers, and law makers.

As we move closer to 2025 and 2030, which are the targets for many brands to achieve their stated sustainability goals, the acceleration of recyclable mono-material flexible packaging, the benefits it offers to brands, consumers, and the environment will only continue to increase. As consumers become more aware and educated on the recyclability of mono-material flexible packaging, its role as a resource in the circular economy, and the holistic positive environmental benefits it possesses (from reduced plastic production in the first place to decreased plastic waste in the environment), we can only be excited about the future; a future where we address the global waste challenge one pouch at a time.

Sources:

1. Flexible Packaging, <https://glenroy.com/flexible-packaging/>
2. "Creating a Circular Economy for Plastics", <https://www.sustainability.com/thinking/creating-a-circular-economy-for-plastics/>
3. Sustainable Packaging Coalition's How2Recycle program, <https://how2recycle.info/sdo>
4. Your Recycling Solution For Plastic Film Packaging, <https://nextrex.com/>
5. Extended Producer Responsibility (EPR) Basics - Fact Sheet, <https://www.flexpack.org/publication/RG93bmxvYWQ6NzY3>



It's A Journey 2023, by Eco Artist,
Francesca Busca.

'It's a Journey' 2023. "100% waste: (38 reused tube papers) Metro, Evening Standard and City A M. papers. Commission for a global financial services firm in the City."

Francesca Busca is an artist, Eco-artist, artWORKivist, rubbish artist, mosaicist and environmental artist from London that uses rubbish and mixed media in her installations. She aims "to provide a small example of CIRCULAR ECONOMY to stimulate ENVIRONMENTAL AWARENESS and responsibility in the professional sphere, spreading the belief that they are pervasive and necessary in all aspects of our lives."

Busca is currently a lecturer of the Fabrication module at the London School of Mosaic, has participated in over 60 art exhibitions internationally, received over 30 awards and has been featured in multiple publications.

"Bringing environmental activism to the workplace," Busca shares, "I cherish the thought of helping to change our habits by making us look at waste under a different light: not as something disposable which needs to leave our space as soon as possible, but rather as an object which has a story, a value, and which deserves a second chance as it is: from waste to wonder."

by Eco Artist,
Francesca Busca.



NAVIGATING CLIMATE CHANGE THROUGH ART: A CREATIVE EXPLORATION INTO SUSTAINABILITY

by *Lauren Leitner*

I'm an abstract painter located in Milwaukee (soon to be Wausau, WI) and the founder of Calla Terra Studios, a community-focused, sustainability-driven eco arts venture. There are two things in my life that have converged in the recent past, inspiring this journey: my childhood exploring Wisconsin's Northwoods and my work in community-based youth arts programming.

I was about two years old when I went up north to Boulder Junction for the first time. (Wisconsinites like to debate about what qualifies as "up north"...this town hits the mark.) There are pictures of me at sunset by the docks near our cabin, wearing a striped shirt and yellow shorts, with blonde curls and a cheesy smile, and I am in heaven. I so vividly remember how supremely special everything was – watching a musky follow my dad's bait alongside the boat, the bald eagles sitting majestically atop the pines, and the loons on the water being the only discernible sound.

The coolest part was that the past three generations of my paternal side had enjoyed the same memories in the same place. Each parent had instilled the importance of natural serenity in each successive generation, ultimately becoming deeply rooted in me. How astoundingly lucky I was to grow up in a sanctuary like Wisconsin's Northwoods.

I've been working in the arts and culture industries, and with youth ages 1-21, for 17 years. I started working as an arts educator and administrator in 2017 while pursuing my Master's Degree in Community Arts. In my role as Program Manager at ArtWorks for Milwaukee, I wanted to open a door for youth to spread an important message about their environment and recognize their potential to create positive change in their city.

What resulted was an environmental arts program that took place in the 30th Street Corridor on Milwaukee's Northwest Side. The program started evolving organically as our existing network of community partners started spidering out like a web – the beauty of people working towards the same goal. In this case, goals in the Corridor included land and water pollution and stormwater management.



I had a vision to create some sort of public assemblage artwork out of trash, hygiene be damned. We came up with the idea for a mosaic made of plastic bottle caps, which would serve as an entrance sign for Green Tech Station, a new environmental education site led by our partner, Northwest Side Community Development Corporation. But our neighborhood cleanups proved that roadside litter was too damaged to use for this project, so we turned to the community.

Jenni Reinke, the artist leading the mosaic, worked with the teens to come up with a plastic collection goal. They aimed high for 5,000 bottle caps, which we admittedly



felt was pretty ambitious. I set up a rain barrel at Outpost Natural Foods, a local co-op grocery store, as a collection point, then we sent out a public call for plastic. Throughout the six-week collection period, the rain barrel was about 5% full at the end of each week. But when I stopped by after our collection deadline, I found it nearly overflowing. I was in complete disbelief, and nearly in tears at this level of contribution to our small nonprofit. With that, the teens had exceeded their goal...and then we found out that Penzey's

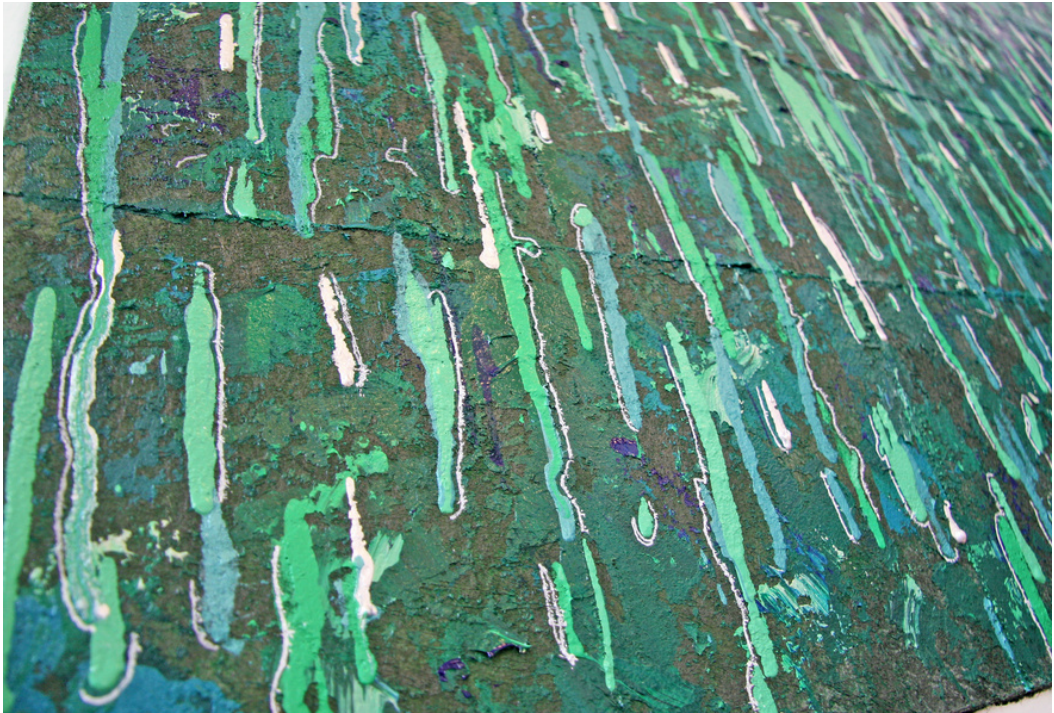
Spices was donating tens of thousands of recycled caps as well. I received inquiries from people in cities hundreds of miles away, some of whom ended up serving as volunteers. It was the strongest feeling of community that I've ever experienced and it was beautiful.

The team of teens came up with a design for the mosaic that illustrated Lincoln Creek emptying into the Milwaukee River and then opening up into Lake Michigan. They laid out their vision on 16 4x4-foot plywood panels, one for each letter of Green Tech Station. Dozens of volunteers helped sort plastic colors and drill each individual

bottle cap onto the wood. We estimated, based on the number of screws Jenni purchased, the mosaic consisted of 15,000 bottle caps.

The unveiling of the mosaic was a very special day, not only seeing this large-scale work of art that such a small team created on a very tight timeline, but also being on-site with the volunteers, residents, community partners, youth, artists, and donors who made it happen. It was truly, in every way, a community art project.

Through my work with environmental champions, my personal exploration into sustainability, and simply existing on a planet with increasingly severe weather,



I recognize more and more that Mother Earth will be there for us as long as we can – or choose to – be there for her. Ms. Yvonne McCaskill, an incredible woman and 50+ year resident in the Corridor, once said, "Water is king." I'll never forget that. It was a reminder that humans, in reality, have very little power when it comes to our planet.

I've been creating contemporary art for about a decade and took my art practice full-time last year. With no conscious intention to do so, I started incorporating recycled, reclaimed, and natural materials into my work. I'd experimented with these types of materials a couple years prior, but dedicating more time to my arts practice than I ever have, the experimentation went to a new level.

I suddenly found myself collecting things, such as textiles and plastics, that our household was discarding and could be repurposed. I started mixing things into my paint (sand, grout), laying things under my paint (dryer sheets, toilet paper), and adhering things over my paint (glass, shredded plastic). I've also started exploring the world of nontoxic media by slowly learning to make paint using naturally occurring pigments and plant-based paint binders.

My artistic style has always been very meticulous, so playing with trash and fabricating paint led me to a mild identity crisis. But I reminded myself that this experimentation was part of my latest life journey. I needed to embrace it and follow my creative instincts.

I decided I wanted to take this concept into the community. I was missing that level of engagement and I wanted others to learn about their environment. So I developed a business rooted in sustainability, alongside a medium that has proven for centuries to be a means of societal communication and unity: art. Calla Terra's goals are to raise awareness about climate change through the arts, foster environmental exploration for youth, and engage the community in eco arts workshops and public art, among many other ideas and aspirations I look forward to fulfilling.

Only a half year or so into the venture, Calla Terra is a seedling I'm nurturing using my fine arts, community arts, youth development, business, and nonprofit admin background. I'm fortunate to be receiving even more community support over the next three years, as I've been accepted into a Madison-based business accelerator program for socially focused entrepreneurs. I'm so excited for my mission to blossom.

Ultimately, this mission very much aligns with my grandmother, Patricia, a children's book author who wrote an essay in 1970 titled "Wisconsin Wellspring," in which she narrates a family trip up north. The last paragraph, recalling their last day on vacation, is as relevant today as it was over 50 years ago, and reflects the long-term impact I hope to make with Calla Terra:

"As we drove off, thoughts nibbled at my mind of the pristine beauty of nature that had been ours. I wondered if our children would be able to bring their families to the lovely clean waters of the northland; if nature would, in this age of almost over-civilization, be available in all its beauty and simplicity for a future generation. It is to be hoped that the children of our children's children will someday be able to restore their souls, as we did, at the fountainhead of nature we found in the Northwoods of Wisconsin."



Pleasant Hill Farm in Fenville, Michigan.
Photography by Chris Slonske.

JOYSTIK: MIND-BODY MEDICINE

by Dr. Sarah Pierce and Christian Stoll

The last few years have made all of us too aware of how stress impacts our lives. We lose sleep, can't focus, don't use our best judgment, and don't show up how we want to in our relationships or jobs or education. No matter how we experience stress, many of us feel the same: we regret not being "our best self" and ultimately lose joy in our life.

While there are more solutions than ever before claiming to decrease stress, (especially in the meditation space), those solutions don't

tend to stick. An estimated 86% of people who tried meditation didn't end up as regular practitioners.

This is where Joystik comes in. Joystik offers a mind-body medicine technique that is more engaging, simpler and more powerful than what already exists. Our unique solution uses an evidence-based technique and enhances it to provide more value in your life and give you a powerful, on demand tool. We understand that no matter how great a solution is, if it isn't simple and engaging enough to make part of your daily routine, then it isn't enough. Period.

Autogenics is evidence-based and creates a relaxation response in the body, the opposite of the fight or flight response. During a relaxation response, our heart rate, blood pressure, and breathing decrease, and a feeling of calm occurs. Autogenics was developed to target the physical expressions of stress by using a series of phrases to gain a level of control over these processes. Over the years it has advanced from a relaxation technique to a tool that optimizes performance, health and well-being. NASA and Olympic athletes harnessed autogenics to perform at their best. Through the power of self-suggestion, Joystik teaches you how to consciously and intentionally control your Autonomic Nervous System.



Autogenics is based on decades of research and clinical studies. It has been shown to improve physical and emotional well-being, and even skin appearance. It's safe to use for ages 5 and up. Joystik enhances autogenics with classical conditioning, which teaches how to associate two previously unrelated stimuli to change behavior. This was demonstrated by Pavlov, who rang a bell when dogs were fed. At first, the dogs salivated because they had food to eat, but over time, the sound of the bell alone caused the dogs to salivate, even when no food followed. This effect is known as conditioning and we use it here to make your training more powerful. Don't worry, we won't make you salivate! We will train your brain to learn that a session of Joystik causes you to feel almost immediately calmer. This will give you superpowers to use with our on-demand benefit, the Power Up Meter. Power Up lets you de-stress, focus, feel calmer, and improve performance in under 10 seconds!



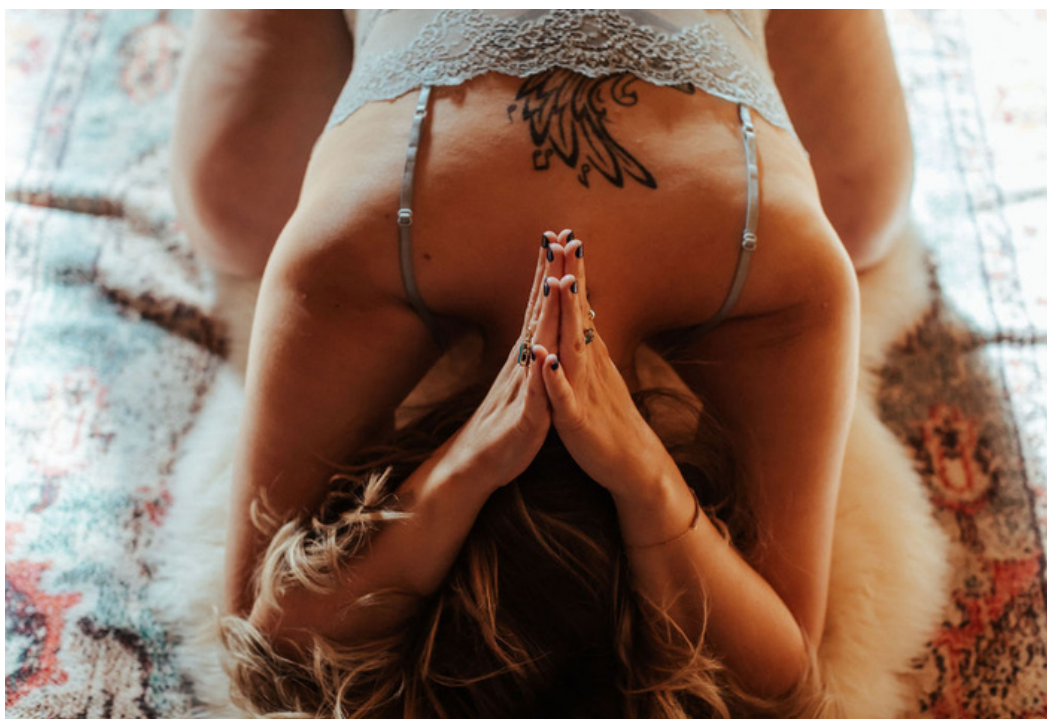
We want to help you regain control over your stress response. Everyone is talking about the best tech, but we've forgotten the most powerful equipment there is, you! Joystik teaches the tools you need to be your own "controller," enabling you to connect and harness the power of your mind and body. Join our waitlist for the upcoming app at joystik.life, so you can connect and live your best life!



Pleasant Hill Farm in Fenville, Michigan.
Photography by Chris Slonske.

3 WAYS TO INTEGRATE YOGA INTO YOUR DAILY LIFE

*by Molly Sommerhalder; photography by Shaena Ragna
Photography and Dan Herda*



Close your eyes and imagine how you feel after your yoga practice.

You may feel at peace with yourself and relaxed in your body, mind, and spirit.

Now open your eyes and notice that those feelings slip away as you return to your current space.

Coming off your mat and back into the real world can be daunting and you may find yourself craving the bliss you found from your practice.

What if you can take what you experience and learn on your mat, and integrate it into your daily life?

The purpose of yoga is to unite the body, mind, and spirit through a variety of practices so you can connect to your true nature. Your true nature is the being that exists beyond all form and is your purest self.

Every time you come to your mat, you are connecting with your pure being and the practice is integrating into your life each time even if you don't consciously experience it.

Knowing that you are already imprinting your practice into your daily life, how can you consciously experience it?

Let's explore three ways you can find your practice in your daily life.

1. Slow down and breathe:

Your breath is your guide on how your body is responding to your daily tasks,

stress level, and pace you're living your life.

As a collective, we generally don't take time to bring awareness to the breath. One of the simplest ways to find instant peace is to pause and take 3-5 deep, conscious breaths in and out of your nose with a longer exhale to calm the body and mind. This will lower your stress levels and create a sense of calm wherever you are located.

2. Move your body in a mindful way:

Less is more when it comes to your yoga practice and tuning into your unique body can guide through your limitations. Think of your limitations as a gift because they remind you to be present in your body. By mindfully moving your body in a slow, therapeutic way, you come in tune with what it needs. This helps to release tension slowly over time in the body as well. Throughout your day, take a minute





or more to move your body mindfully by doing gentle twists, forward folds, side stretches, or anything that speaks to you in the moment.

3. Be present and remember love:

Life can be overwhelming and the one way you can lose the post-yoga bliss is by escaping out of the present moment. Being present can be the reassurance to the spirit that you are loved in this very moment. A simple way to remember love and to be present is to slow down and take in your surroundings. You can find a few things that you're grateful for

that you see around you or just take note of what you see around you. Doing this in nature is especially therapeutic and rejuvenating. Another option is to find a mantra or affirmation that reminds you to be present in your heart.

There are no guidelines on how to integrate your practice into your life. It's an experience that you can make your own.

So take a moment and try one or all three of these ways to explore yoga off your mat and see what works for you!

Fragrant Isle
Lavender Farm
on Washington
Island, Wisconsin,
Photography by
Stephanie
Krubsack.





Washington Island, Wisconsin,
Photography by Stephanie Krubsack.

CONSUMERISM

marketed as 'waste-free'

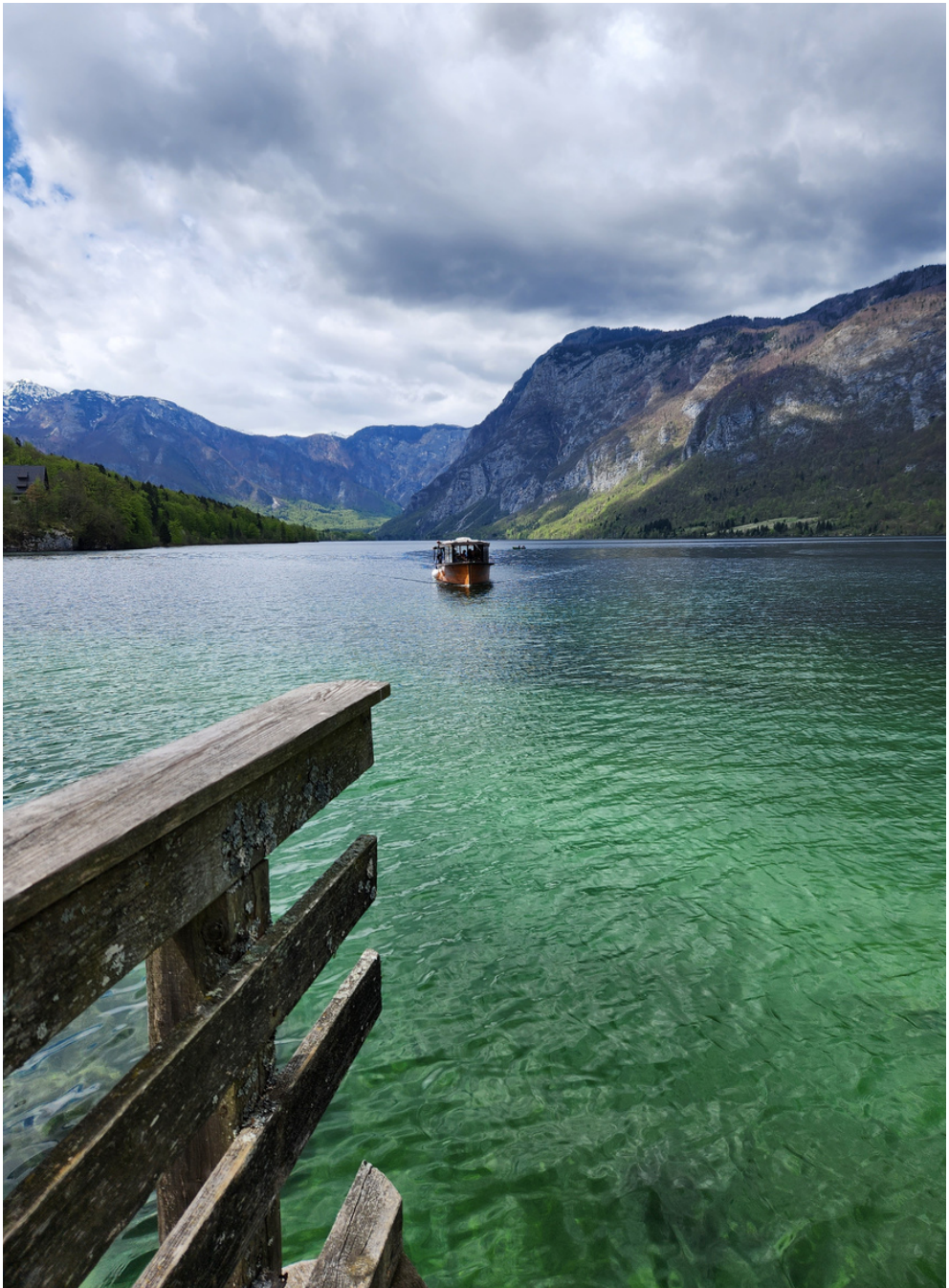


ACTUALLY BEING WASTE-FREE



@brenna_quinlan ♀

Art As Activism, by Brenna Quinlan, illustration.



Lake Bohinj, Slovenia.
Photography by Stephanie Krubsack.



HOW VERY ZEN: ZEN BUDDHISM AND GREEN TEA

by Jennifer Nowicki

You have heard of Zen but where did it come from? What does it mean? First, I will define it, then give some historical background and show how important green tea is to the concept of Zen. According to the Oxford dictionary "Zen is a Japanese school of Mahayana Buddhism emphasizing the value of meditation and intuition." The word Zen comes from the Indian word for mediation.

Zen is Zen Buddhism that originates from Buddhism which was started in India around the 5th Century BCE and eventually spread south and east to Sri Lanka to Mongolia, Korea, Japan, Taiwan, Southeast Asia, etc. Zen Buddhism is a mixture of Taoism and Mahayana Buddhism and a Dharmic religion that believes it is okay to follow and belong to more than one religion. This philosophy does not hate or think badly of other religions. It is a religion of compassion. Mahayana Buddhism is a one of three branches of Buddhism that not only wants followers to liberate themselves from suffering, but also lead other people towards enlightenment and salvation. Zen Buddhism started in China in the 5th century but came to prominence in the

8th century with the Tang and Song dynasties. It eventually spread to Korea, Vietnam, and Japan. In medieval Japan it started to become prominent in the culture with a Buddhist monk named Eisai, introducing the concept of Zen and the tea ceremony to Japan. There are Zen temples and monasteries throughout China, Korea, Vietnam, and Japan with green tea being very important to this way of life and extremely rare for a monastery or temple to not have a ceremonial tearoom. Zen Buddhism arrived in the USA in the mid-20th century and was popular with the Beatniks in the 1950s. It has grown in influence to Western culture since then.

Zen Buddhism and the Japanese tea ceremony are integral to each other. Some principles of the Japanese tea ceremony are a room that is meditative, simple, natural, harmonious, and balanced. The reasoning for this is that a simple and minimal environment allows you to start seeing the beauty in things you may have ignored or thought boring. You also need to prepare yourself mentally before even entering a tearoom and to experience the Japanese tea ceremony. The tea ceremony is more than just grabbing a cup of tea. When matcha tea arrived in



Japan, China was using some powder teas and that was where Japan first encountered tea. Matcha was first drunk in Zen temples to help the monks stay awake. This evolved into becoming the tea used in the Japanese tea ceremony.

To become a Japanese tea ceremony master you need to be trained on the Zen philosophy. The Japanese during the early period of Zen Buddhism and the wealthier monasteries and nunneries had people travel to China to learn Buddhist scriptures, Zen literature, poems, neo-Confucianism, ethics, metaphysics, and Chinese classics. When Kyoto was the Japanese capital, it was the center for learning Chinese techniques



of printing, painting, calligraphy, poetry, ceramics, and garden design. These were known as Zen arts and are important to learn before becoming a Japanese tea master so they could conduct the Japanese tea ceremony. They believe that a moment only happens once, so focusing and enjoying the moment and enjoying the tea is important. If attending a Japanese tea ceremony in Japan, you will also see centuries-old broken tea bowls being used after the "kintsugi" fix (gold used to fix the cracks and broken pieces together) because life is imperfect and that is what makes life beautiful.

Zen Buddhism has greatly influenced and is an integral part of the Japanese tea ceremony as much as the tea ceremony becoming essential and integral to Zen Buddhism.





Burg Hohenzollern, Germany.
Photography by Stephanie Krubsack.



Schloss Lichtenstein, Germany.
Photography by Stephanie Krubsack.

TANDOORI GOBI TIKKAS

by Medha Chakravarthula



Prepare your taste buds for a burst of delectable flavors with our mouthwatering recipe of Tandoori Gobi Tikkas. This vegetarian delight combines the goodness of cauliflower florets with a blend of aromatic spices and tangy vegan yogurt. Whether you choose to roast them in the oven or sizzle them on the barbecue, these tikkas will surely impress your family and friends. So, let's dive into the recipe and unlock a world of culinary delight!

Ingredients:

- 500 grams (5 or more c) cauliflower florets, boiled or steamed
- 200 grams (heaping $\frac{3}{4}$ c) vegan yogurt
- 1 teaspoon chaat masala (optional)
- Fresh coriander leaves, for garnish
- 1 teaspoon coriander powder
- 3 tablespoons chickpea flour
- 2 tablespoons tomato paste
- 2 teaspoons garam masala
- 1 teaspoon chili powder
- 1 teaspoon salt

TANDOORI GOBI TIKKAS

by *Medha Chakravarthula*

Directions:

1. **Marinating the Cauliflower Florets:** Start by marinating the boiled or steamed cauliflower florets. In a large mixing bowl, combine the vegan yogurt, garam masala, salt, tomato paste, chickpea flour, coriander powder, chili powder, and chaat masala (if desired). Mix well until all the ingredients are thoroughly combined.
2. **Adding the Cauliflower Florets:** Add the cauliflower florets to the marinade, ensuring that each floret is coated evenly. Allow the cauliflower to marinate for at least 30 minutes. For more intense flavors, marinate the florets for up to 2 hours, refrigerated.
3. **Roasting in the Oven:** Preheat your oven to 200 degrees Celsius or 400 degrees Fahrenheit. Line a baking tray with parchment paper or lightly grease it. Arrange the marinated cauliflower florets on the tray, making sure they are spaced out evenly. Place the tray in the preheated oven and roast for approximately 20 minutes or until the tikkas are golden brown and slightly charred around the edges.
4. **BBQ Option:** Alternatively, you can grill the marinated cauliflower florets on a preheated barbecue. Skewer the florets and grill them over medium heat, turning occasionally until they are cooked through and have a slight char, usually taking around 15-20 minutes.
5. **Serving the Tandoori Gobi Tikkas:** Once the tikkas are done, remove them from the oven or barbecue and let them cool slightly. Garnish with fresh coriander leaves for an added touch of freshness. Serve the Tandoori Gobi Tikkas as an appetizer or as a side dish with mint chutney, sliced onions, and lemon wedges. They are perfect for gatherings, parties, or even as a delightful snack for yourself!

ZOODLE SLAW

by Cindi Lockhart, RDN, LD, *functional nutritionist*



Ingredients:

- 1 medium zucchini, spiralized
- 1 c purple cabbage, thinly sliced
- 1/2 red pepper, thinly sliced
- 1 c shredded carrot

Dressing:

- 1 tbsp almond butter
- 1 tbsp tamari sauce
- 1 tbsp maple syrup
- 1 tbsp lime juice
- 1 tsp fresh ginger- finely minced, or ginger paste
- Pinch red pepper flakes
- 2 tsp sliced almonds
- 1/4 - 1/2 c cilantro

Directions:

1. In a large bowl combine zucchini, carrot, cabbage and red pepper.
2. In a smaller bowl, heat up almond butter in the microwave for 15-25 seconds so it's easier to combine.
3. Add tamari, maple syrup, lime juice, ginger, red pepper flakes, chopped cilantro and sliced almonds.
4. Combine until creamy.
5. Divide dressing and vegetables into 2 portions. Only dress the portion you're planning to eat that day.
6. Garnish with more cilantro if you'd like. Serves 2.

FERMENTED HONEY GARLIC SYRUP

by Dr. Katarina Meister

This honey has many purposes. It is easy to make and can be a powerful food as medicine example. For one, it is a great way of getting in fermented foods which act as prebiotics, and are essential for having a diverse microbiome and a healthy gut. Honey has antimicrobial and demulcent qualities which help to support the immune system, coat any irritated tissues, and relieve dryness and pain. This makes honey great for an irritated throat, or upper respiratory tract. Garlic (*Allium sativum*) is also a great anti-microbial, and expectorant herb. Garlic is also a great cardioprotective herb, that helps to lower your blood lipids, blood sugar, and blood pressure! All in all, this fermented syrup is perfect for supporting your immune system for any cold or flu and supporting your cardiovascular system. Food truly is medicine!



Ingredients:

- 1 cup of local raw honey
- 1 cup of fresh raw garlic cloves, peeled
- 16oz mason jar with a lid

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Directions:

1. Prepare raw garlic cloves, and lightly crush the garlic. Then fill the mason jar with the peeled garlic and top with the raw honey. Make sure the honey is completely covering the garlic. Also be sure that there is some room or headspace left in the jar for the fermentation process to occur. After this is done, place a lid on the jar and once sealed turn the jar upside down. Store in a dark place.
2. For the next 2 weeks you will need to release gasses daily, to avoid any buildup of CO₂. Quickly open the lid, release the gasses, reseal the lid, shake it once or twice, and turn it back upside down. Continue to store in a cool dark place. This allows for the fermentation process to occur.
3. After 2 weeks the fermentation process is over, and the garlic is ready to enjoy! Feel free to allow your garlic to ferment longer for a stronger flavor, as you continue to ferment the honey, the honey will thin and become more liquid. This is a normal process.
4. After the fermentation process is over, continue to store the fermented honey garlic in a cool dark place, away from direct sunshine or heat. If no moisture enters the jar, the garlic honey is safe to use for up to a year.
5. Enjoy 1-2 tsp of the syrup or eat 1 clove of garlic as often as you would like!

WATERMELON & "FETA" SUMMER SALAD

by *Stephanie Krubsack*

Enjoy this beautiful, sweet and savory salad for your next picnic or barbeque! Feel free to swap out dairy-free feta for the real thing depending on your dietary needs.

Ingredients:

- 1 package vegan feta (Violife is the favorite brand)
- 1 small red onion thinly sliced (or ½ large onion)
- 5-6 cups cubed watermelon
- ¼ c chopped parsley



Directions:

1. First slice the onion into thin long slices, separating each layer.
2. Next, slice the watermelon and cut into cubes, removing any seeds.
3. Cut the block of feta into smaller, ½ inch cubes, using about ¾ of the package.
4. Rough chop a small bunch of parsley.
5. Mix all ingredients together in a large bowl and serve immediately.
6. Store the salad in the refrigerator for up to 3 days.

SESAME CUCUMBER EDAMAME & AVOCADO SALAD

by Stephanie Krubsack



Ingredients:

- 2 avocados cubed
- 3 green onions sliced
- 6-8 small english cucumbers cut into cubes
- 1 package shelled & cooked edamame

Dressing:

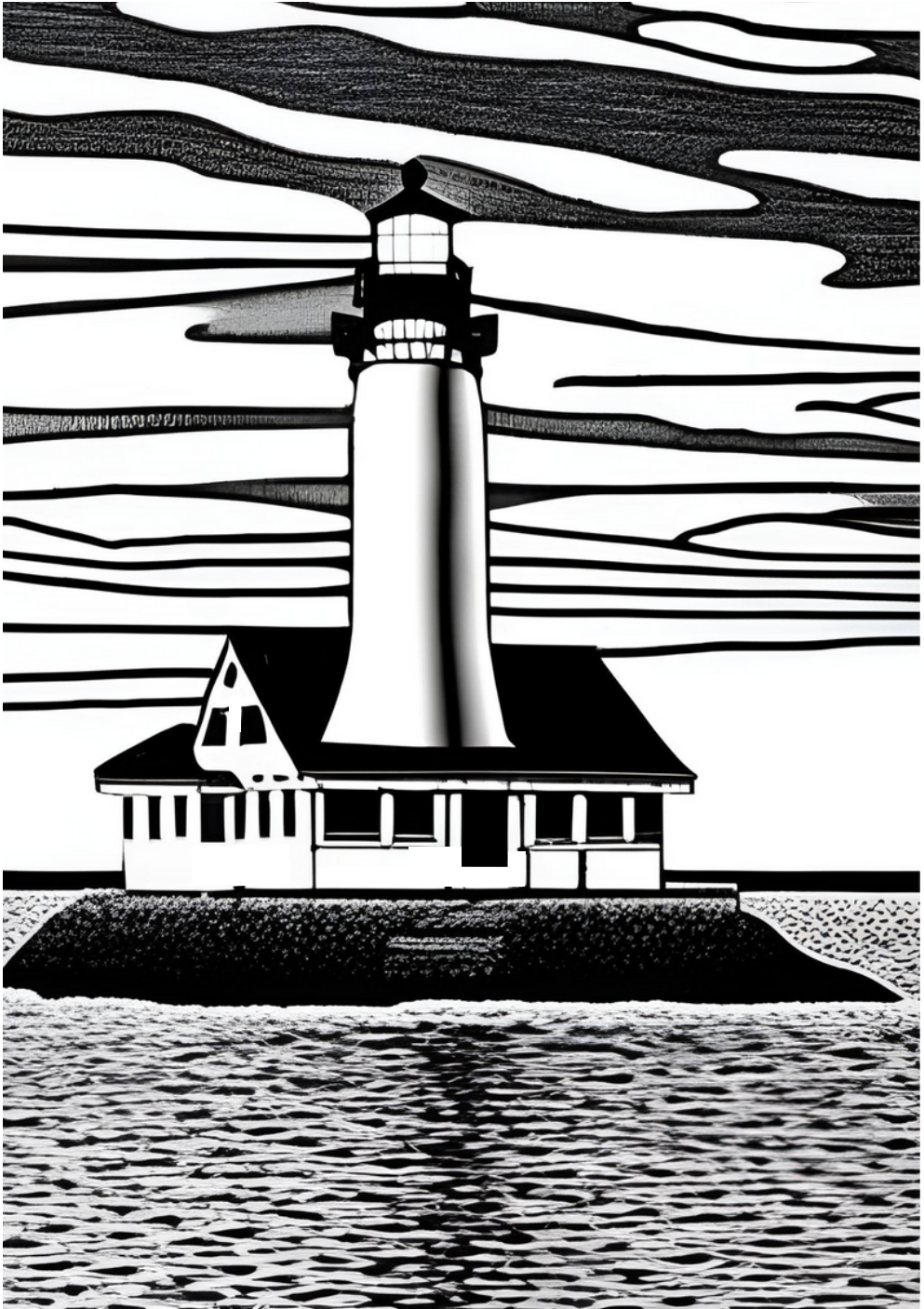
- 2 tbsp toasted sesame seeds
- 2 tsp dried or fresh cilantro
- 1 tsp grated ginger
- 2 tbsp sesame oil
- 3-4 tsp soy sauce
- ¼ c avocado oil
- ¼ tsp salt
- 2 tsp acv

Directions:

1. Chop the onion, cucumber and avocado and mix together, being careful to not over mix and mash the avocado chunks.
2. Toast the sesame seeds in a dry pan without oil on medium heat until they turn slightly brown. Set aside to cool.
3. Grate the ginger, chop the cilantro and mix together with the remaining ingredients and sesame seeds.
4. Coat the main salad ingredients with the dressing and enjoy!
5. Keep refrigerated for up to three days.



Walensee, Switzerland.
Photography by Stephanie Krubsack.





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