

# WEEKLY DIGEST

## TINY GREENS, BIG DREAMS: MICROGREENS AND HEALTHY SLEEP

**MICROGREENS ON MAINSTREET: NOW AVAILABLE AT SAFEWAY**

**CREATIVE RECIPES:** Watermelon Basil Microgreens Lemonade

**NUTRITION SCIENCE:** Sustainable Nutrition with Sulforaphane, Microgreens, and Diabetes

**CULTIVATION TECHNIQUES:** Seeding Innovation and the Little Green Seeding Machine

*“Delivered to Your Inbox Every Monday,” your summary digest of the latest microgreens, urban, vertical farming, and new trends and exciting startup stories from around the world.*



**UNLOCK MARKETING  
SUCCESS FOR YOUR  
MICROGREENS BUSINESS**

A Marketing Plan for Your Digital Business

**GET THE PLAN NOW!**

# ***Tiny Greens, Big Dreams: Microgreens and Healthy Sleep***

Vol. 2024 No. 29

Monday, August 12, 2024

<b>Nutrition Science</b>	<b>5</b>
Sustainable Nutrition: Sulforaphane, Microgreens, and Diabetes.....	5
<b>Creative Recipes</b>	<b>7</b>
Watermelon Basil Microgreens Lemonade.....	7
<b>Community News</b>	<b>9</b>
Vertical farming program taking root in Diamond Valley.....	9
Hubbub launches network to connect, grow, and fund green spaces.....	9
Green Up Farm: Pembrokeshire pair's thriving venture.....	10
<b>FEATURED ARTICLE</b>	<b>12</b>
Tiny Greens, Big Dreams: Microgreens and Healthy Sleep.....	12
<b>Evidence-based Expertise</b>	<b>23</b>
AI-driven hydroponic platform for home settings.....	23
<b>Cultivation Techniques</b>	<b>24</b>
Seeding Innovation: The Little Green Seeding Machine.....	24
In-house hydroponic garden at the University Club of Portland.....	24
<b>Emerging Industry News</b>	<b>25</b>
Frozen Food Industry Group Strives to Reduce Storage Temperature Standards by 3°C.....	25
<b>Commercial Best Practices</b>	<b>26</b>
Microgreens on Mainstreet: Now Available at Safeway.....	26



**COMPREHENSIVE  
FOOD SAFETY FOR  
MICROGREENS FARMS**

Maximize Safety, Minimize Risks, Safeguard  
Your Reputation

**GET THE GUIDE!**

**MORE INFORMATION AT [WWW.MICROGREENSWORLD.COM](http://WWW.MICROGREENSWORLD.COM)**

## Nutrition Science

### Sustainable Nutrition: Sulforaphane, Microgreens, and Diabetes

Several studies have shown that microgreens are beneficial for people with diabetes.

A new approach was employed to investigate the effects of

broccoli microgreen powder on insulin resistance in people with type-2 diabetes.

The results showed that powdered broccoli microgreens with a high sulforaphane concentration may significantly reduce serum insulin levels and lessen diabetic complications (*Bahadoran et al., 2012*).

Another study has shown that sulforaphane, which can be found in early broccoli microgreens, may be effective as an adjunct treatment for type 2 diabetes.

Hyperglycemia and oxidative conditions can be kept under control with the help of some PPR that may activate (*Bahadoran et al., 2013*).

Another study investigated how different planting media and nutrient solutions affect the growth and sulforaphane content of red cabbage microgreens.

The researchers tested four planting media (rockwool, cocopeat, tissue paper, vermiculite) and two nutrient solutions (mineral water and young coconut water).

Key findings:

- **Vermiculite**, combined with young coconut water, produced the tallest microgreens and the highest fresh weight.

- **Cocopeat** with young coconut water resulted in the **highest sulforaphane content**, doubling the amount compared to other treatments.
- Young coconut water was generally more effective than mineral water as a nutrient solution.

The study suggests that planting media and nutrient solutions significantly impact microgreen growth and phytochemical content.

Cocopeat and vermiculite were particularly effective media due to their water and nutrient retention properties.

Young coconut water likely boosted growth and sulforaphane production because of its rich nutrient profile, including amino acids like methionine.

These results indicate that optimizing growing conditions can substantially increase the nutritional value of microgreens.

Using cocopeat as a planting medium and young coconut water as a nutrient solution could be an effective way to enhance sulforaphane content in red cabbage microgreens, potentially improving their health benefits.

Sources:

T Septirosya, et al. "Sulforaphane Content Enhancement of Red Cabbage Microgreens by Using Different Planting Media and Nutrition Solution." IOP Conference Series. Earth and Environmental Science, vol. 1302, no. 1, 1 Feb. 2024, pp. 012016–012016, <https://doi.org/10.1088/1755-1315/1302/1/012016>.

Bahadoran, Z., Tohidi, M., Nazeri, P., Mehran, M., Azizi, F., & Mirmiran, P. (2012). Effect of broccoli sprouts on insulin resistance in type 2 diabetic patients: a randomized, double-blind clinical trial. *International Journal of Food Sciences and Nutrition*, 63(7), 767–771. <https://doi.org/10.3109/09637486.2012.665043>

Bahadoran, Z., Mirmiran, P., & Azizi, F. (2013). Potential Efficacy of Broccoli Sprouts as a Unique Supplement for Management of Type 2 Diabetes and Its Complications. *Journal of Medicinal Food*, 16(5), 375–382. <https://doi.org/10.1089/jmf.2012.2559>

## Creative Recipes

### Watermelon Basil Microgreens Lemonade

A delightful Watermelon Basil Lemonade that incorporates both fresh basil and the option to use basil microgreens as a garnish.

This recipe balances the sweetness of watermelon with the tartness of lemon and the aromatic touch of basil.

The honey or agave syrup can be adjusted to your preferred level of sweetness.



The basil microgreens are mixed in the drink to infuse their flavor.

The basil leaves serve as a fresh, visually appealing garnish that adds a subtle basil flavor to each sip.

- Prep Time: 15 minutes
- Cook Time: 5 minutes (for simple syrup)
- Chill Time: 1 hour
- Total Time: 1 hour 20 minutes
- Category: Beverage
- Method: Blending
- Cuisine: American Fusion
- Yield: 6 servings

### Ingredients:

- 4 cups cubed seedless watermelon
- 1 cup basil microgreens, plus extra for garnish
- 1/2 cup fresh lemon juice (about 3-4 lemons)
- 1/4 cup honey or agave syrup (adjust to taste)
- 2 cups cold water
- Ice cubes

### Instructions:

1. In a blender, combine the cubed watermelon and 1 cup of basil microgreens. Puree until smooth.
2. Strain the watermelon-basil puree through a fine-mesh sieve into a pitcher to remove any solids.
3. In a small saucepan, combine honey (or agave) with 1/4 cup of water. Heat gently, stirring until the sweetener is fully dissolved. Let cool.
4. Add the cooled sweetener mixture, lemon juice, and remaining cold water to the watermelon-basil juice in the pitcher.
5. Stir well to combine all ingredients.
6. Refrigerate for at least 1 hour to allow the flavors to meld and the lemonade to chill thoroughly.
7. Before serving, stir the lemonade well, as some separation may occur.
8. Serve over ice, garnished with additional basil microgreens.

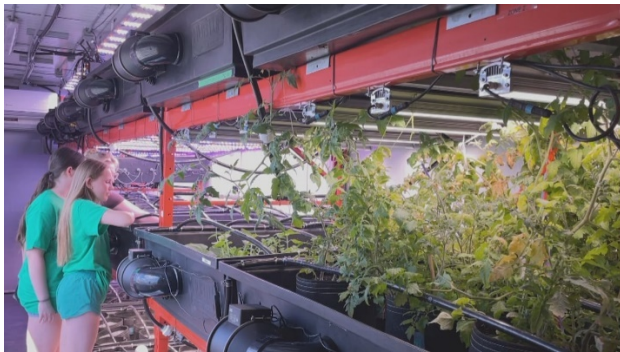
Enjoy your refreshing and uniquely flavored Watermelon Basil Microgreens Lemonade!

The CBC's Allison Dempster went to check it out and meet the young green thumbs.

Source: Dempster, A. (2024, August 5). \*Vertical farming program taking root in Diamond Valley\*. CBC News. <https://www.cbc.ca/player/play/video/9.6462977>

## Community News

Vertical farming program taking root in Diamond Valley



At Oilfields High School in Diamond Valley, Calgary, BC, one classroom is unlike the others.

It's a 12-metre-long sea can that's been transformed into a vertical farm.

Inside, students are growing herbs and microgreens, and they're selling them to local markets and restaurants.

Hubbub launches network to connect, grow, and fund green spaces



Hubbub has recently introduced the Community Nature Network, aimed at promoting the establishment and enhancement of community-led green spaces across the U.K.

Supported by the Wates Family Enterprise Trust and the Bentley Environmental Foundation, this initiative provides funding opportunities, resources, and guidance to community groups.

It seeks to foster collaboration among local organizations to respond to environmental and social needs effectively.

Research indicating that participation in nature projects encourages environmentally friendly practices highlights the network's purpose—to empower communities and facilitate a healthier relationship with nature.

By offering free membership, resources like videos and templates, and financial backing for previous projects, this initiative aims to support community microgreen gardening and environmental stewardship efforts.

Source: May, M. (2024, August 8). Hubbub launches a network to connect, grow & fund green spaces. U.K. Fundraising. <https://fundraising.co.uk>

## Green Up Farm: Pembrokeshire pair's thriving venture



Toni and Alex Borella, a couple from Pembrokeshire, transitioned from their previous careers to establish Green Up Farm, which focuses on growing microgreens and herbs.

After moving from London in 2019, while both were furloughed, they utilized the time to start cultivating crops in their spare room.

Their initiative gained momentum with support from the British Business Bank's Start Up Loans program, providing them with essential funding.

They now operate from a 100-square-meter commercial unit, where they grow various

microgreens and employ environmentally friendly practices, including using reusable packaging.

Despite challenges in distribution logistics, they have innovated their own sustainable growing trays.

The couple plans to expand their distribution beyond Wales and explore energy-efficient greenhouse options, reflecting their commitment to eco-friendly entrepreneurship.

Source: Birt, E. (2023). Pembrokeshire couple's hobby turns into green business. \*Western Telegraph\*.

<https://www.westerntelegraph.co.uk/news/24508229.green-farm-pembrokeshire-pairs-thriving-venture/>

## Microgreens Marketing

FARM NAME LLC

BUSINESS  
MARKETING  
DIGITAL PLAN

BUSINESS  
MARKETING  
STRATEGIES



+1 234.456.7890  
Street Address  
Ci t y, Postal Code State,  
Country

[MONTH, YEAR]

**ORDER NOW!**

## FEATURED ARTICLE

### Tiny Greens, Big Dreams: Microgreens and Healthy Sleep



You're probably no stranger to the occasional sleepless night, but what if you're among the millions who struggle with **chronic sleep disorders**?

The numbers are staggering, and **traditional solutions** often fall short.

The latest sleep hack? **Lettuce water**. TikTok says it works. But does it?

We're always searching for that magic bullet, the quick fix to our sleepless nights. But maybe the real issue isn't about finding the right potion.

Perhaps it's about addressing the underlying causes of our restlessness. The stress. The poor nutrition. The screens. The constant noise.

What if better sleep starts with better choices?

That's where microgreens come in - the young, nutrient-dense versions of herbs and veggies that pack a surprising punch.

By utilizing the potential of specific microgreens like **chamomile** and **lavender**, you may be able to regulate your sleep patterns and calm your mind.

But what makes these tiny greens so special, and how can you start using them to **transform your sleep**?

## The Sleep Crisis: Current State and Statistics



You're not alone if you're struggling to get a good night's sleep - **insomnia**, **sleep apnea**, and other **sleep disorders** affect millions of people worldwide.

As you drift off to sleep tonight, consider this: nearly a third of adults in the United States are struggling with **insomnia**, while millions more are living with **undiagnosed sleep apnea**.

These **staggering statistics** are merely the tip of the iceberg in a global sleep crisis.

For individuals struggling to get a good night's sleep, the **economic burden of sleep deprivation** can be staggering, with estimated annual costs of up to \$411 billion in the U.S. alone.

While the economic burden of **sleep deprivation** is staggering, it's only half the story.

You'll want to know that sleep deprivation is linked to a host of **chronic conditions**, including diabetes, **cardiovascular disease**, obesity, and depression.

In the United States alone, lack of sleep contributes to approximately 100,000 **motor vehicle accidents** and 1,500 fatalities annually.

You'd think that with the staggering statistics on **sleep disorders**, we'd have an abundance of **effective treatments** to tackle the problem.

But, the reality is that many current treatments have **significant limitations** that hinder long-term success.

This makes **healthy sleep solutions** like microgreens a valuable investment for anyone looking to wake up to a more productive and cost-effective tomorrow.

### **Pros:**

- Microgreens offer a natural and non-invasive approach to addressing sleep disorders, reducing the risk of adverse reactions associated with traditional sleep aids.

- Incorporating microgreens into one's diet can lead to improved sleep quality, increased energy levels, and enhanced overall well-being.
- Microgreens are a cost-effective solution compared to traditional sleep aids, making them an attractive option for individuals looking to manage sleep disorders without breaking the bank.

### Cons:

- The effectiveness of microgreens as a sleep aid is still being researched, and more studies are needed to fully understand their impact on sleep quality.
- Microgreens may not be suitable for individuals with specific dietary restrictions or allergies, and their consumption should be approached with caution.
- The availability and accessibility of microgreens may be limited in certain regions, making it difficult for some individuals to incorporate them into their diets.

Clearly, we need **innovative solutions** to address the sleep crisis, and that's where microgreens, like nutrition and lifestyle changes, come in – but more on that later.

### Traditional Sleep Aids: What We Know Works

Sleep is the **invisible battleground** of our modern lives. We've been sold pills, potions, and promises, but what if the answer isn't in a bottle?

Traditional sleep aids - **benzodiazepines**, melatonin, **antihistamines** - are band-aids on a deeper issue. Sure, they work, but at what cost?

Here's a radical thought: What if better sleep starts with you? Not a pill, but a **practice**. A consistent schedule. A **bedtime ritual**. A room designed for rest.

And what about the unexpected heroes? Lettuce, with its anxiety-busting lactucarium and other microgreens like chamomile and lavender, is packed with sleep-regulating magnesium.

These aren't quick fixes. They're investments in yourself, in your ability to show up fully for others.

The sleep industry is a multi-billion dollar giant. But the real currency? Your well-being. Your potential. Your impact.

What if tonight, you chose differently?

## **Microgreens: Nature's Tiny Powerhouses**



As you investigate the world of **microgreens**, you'll uncover that certain varieties have a profound impact on your **sleep quality**.

From the soothing effects of chamomile to the magnesium-rich properties of lettuce, these microgreens are nature's tiny powerhouses that can help you catch those elusive z's.

Lettuce	Rich in magnesium and potassium, lettuce microgreens help <b>regulate your body's internal clock</b> and promote relaxation, making it easier for you to drift off to dreamland ( <i>Luo et al., 2024</i> ).
Chamomile	Packs an impressive amount of <b>apigenin</b> , an antioxidant that gently coaxes your body into a restful night's sleep. As you savor its calming goodness, you're supporting your body's natural sleep-wake cycle, promoting a deeper, <b>more restorative sleep</b> ( <i>Kramer and Johnson, 2024</i> ).
Lavender	Takes the stage with its potent <b>sleep-promoting properties</b> , packing a punch that can help you drift off to dreamland with ease. Lavender microgreens contain <b>linalool</b> , a compound that calms your nervous system, promoting relaxation and reducing anxiety. This makes it easier for you to fall asleep and stay asleep ( <i>XU et al., 2021</i> ).
Beet	Packs a powerful punch of nitrates that convert to <b>nitric oxide</b> in your body. This nitric oxide relaxes your blood vessels and calms your nervous system, helping you drift off to a <b>restful night's sleep</b> ( <i>Kiaer et al., 2024</i> ).
Buckwheat	Gaining attention for its <b>sleep-promoting potential</b> , buckwheat's nutrient-dense greens are rich in <b>melatonin-boosting compounds</b> that can help regulate your body's internal clock and improve the quality of your sleep ( <i>Swami, 2024</i> ).
Red Cabbage	In the domain of <b>sleep-promoting microgreens</b> , red Cabbage emerges as a powerhouse, packing a punch of vitamins, minerals, and antioxidants that can help you drift off to dreamland and wake up feeling refreshed. You'll tap into its rich stores of <b>vitamin C</b> , promoting a <b>restful night's sleep</b> and boosting your immune system.

By incorporating these tiny powerhouses into your diet, you'll be nourishing your body with the essential building blocks for a restful night's sleep.

## The Science Behind Microgreens and Sleep

As you investigate the connection between **microgreens** and sleep, you'll find that these tiny greens are packed with nutrients that play an essential role in regulating your body's internal clock.

Magnesium and sleep regulation	Orchestrate sleep. Its deficiency disrupts melatonin, causing insomnia. Stress amplifies the problem. Magnesium-rich microgreens offer a natural solution, equipping your body for better rest.
Antioxidants and stress reduction	Antioxidants combat stress-induced free radicals, reducing oxidative stress. This calms your nervous system, creating an ideal environment for sleep. Better rest fuels your ability to serve others compassionately.
Melatonin precursors	<b>Brassica microgreens</b> supply melatonin precursors, boosting your body's sleep-regulating hormone production. This natural approach enhances sleep quality and duration.
Microgreens and sleep quality	Combat inflammation, a sleep disruptor that suppresses melatonin. Lettuce and kale's anti-inflammatory compounds calm your body, enhancing sleep quality. You awaken refreshed, ready to serve with clarity.

### *Potential synergistic effects of multiple compounds*

Microgreens' phytochemicals synergistically **regulate circadian rhythms** and reduce inflammation.

Magnesium, potassium, and calcium calm the nervous system, while antioxidants and polyphenols protect cells, enhancing sleep quality and overall health.

## Incorporating Microgreens into Your Sleep Routine



As you investigate the connection between **microgreens** and **healthy sleep**, you're probably wondering how to make these nutrient-dense greens a part of your daily routine.

Boost sleep-promoting nutrients by adding microgreens to salads, smoothies, or sandwiches.

- Try pea shoots in wraps or kale in smoothies.
- Use as garnish for soups or stir-fries.
- Combine with nuts or whole grains for a sleep-friendly snack.
- Start with 1/4 cup, ideally 2-3 hours before bedtime.
- Create recipes like evening salads, smoothies with banana and almond milk, or sautéed sides.
- Consider infusing it into tea or juicing with cucumbers.

Experiment to find what works best.

*Consult a healthcare provider if taking medications or have underlying conditions. Some microgreens may interact with blood thinners or trigger allergies.*

The good news is that incorporating microgreens into your diet is easier than you think, and even small amounts can make a big difference in your sleep quality.



## **Takeaway: Microgreens and Healthy Sleep**

Now that you understand microgreens' potential for improving sleep, it's time to take action.

Start incorporating these nutrient-dense greens into your daily meals.

Their magnesium, potassium, and antioxidants can help regulate your sleep-wake cycle and reduce insomnia symptoms.

As you prioritize your rest, remember that a well-rested you can better serve others.

Add microgreens to salads, smoothies, or garnishes.

Keep a sleep diary to track your progress, noting any improvements in sleep quality or duration.

Share your experiences to inspire others and contribute to our understanding of microgreens' impact on sleep health.



**Transform Your Home into  
a Nutrient-Packed  
Superfood Haven**

Your 9-Day Blueprint to Microgreen Mastery

**GET THE BOOK!**

**MORE INFORMATION AT [WWW.MICROGREENSWORLD.COM](http://WWW.MICROGREENSWORLD.COM)**

## Research

Anusree Sobhanan, & Meena, R. (2024). MICROGREENS: PIONEERING THE FUTURE OF SUSTAINABLE NUTRITION. 9–28. <https://doi.org/10.58532/v3bcag17p1ch2>

Americans don't get enough sleep. Can magnesium supplements help? (2024, August 5). NPR. <https://www.npr.org/sections/shots-health-news/2024/08/05/nx-s1-5060416/sleep-magnesium-supplements>

Kiaer, E., Ravn, A., Poul Jennum, Prætorius, C., Welinder, R., Steffen Ørntoft, Christian von Buchwald, & Backer, V. (2024). Fractional exhaled nitric oxide—a possible biomarker for risk of obstructive sleep apnea in snorers. *Journal of Clinical Sleep Medicine*, 20(1), 85–92. <https://doi.org/10.5664/jcsm.10802>

Kramer, D. J., & Johnson, A. A. (2024). Apigenin: a natural molecule at the intersection of sleep and aging. *Frontiers in Nutrition*, 11. <https://doi.org/10.3389/fnut.2024.1359176>

Lao, Xiang Qian, et al. “Sleep Quality, Sleep Duration, and the Risk of Coronary Heart Disease: A Prospective Cohort Study with 60,586 Adults.” *Journal of Clinical Sleep Medicine*, vol. 14, no. 01, 15 Jan. 2018, pp. 109–117, <https://doi.org/10.5664/jcsm.6894>.

Lone, J. K., Pandey, R., & None Gayacharan. (2024). Corrigendum to “Microgreens on the rise: Expanding our horizons from farm to fork.” *Heliyon*, 10(10), e31111–e31111. <https://doi.org/10.1016/j.heliyon.2024.e31111>

Luo, X., Tang, M., Wei, X., & Peng, Y. (2024). Magnesium depletion score and sleep quality in U.S. adults, NHANES 2005–2014. *Journal of Affective Disorders*, 358, 105–112. <https://doi.org/10.1016/j.jad.2024.05.002>

Stokes, V. (2023, November 18). Can TikTok's Lettuce Water Trend Really Help You Sleep Better? *Healthline*; Healthline Media. <https://www.healthline.com/health-news/lettuce-water-sleep-aid>

Swami, S. (2024). Melatonin and sleep. Elsevier EBooks, 275–290. <https://doi.org/10.1016/b978-0-443-13814-0.00016-8>

Xu, L., Li, X., Zhang, Y., Ding, M., Sun, B., Su, G., & Zhao, Y. (2021). The effects of linalool acupoint application therapy on sleep regulation. *RSC Advances*, 11(11), 5896–5902. <https://doi.org/10.1039/d0ra09751a>

### Medical Disclaimer

*The information provided in this article by Microgreens World and related materials is for educational purposes only and should not be considered medical advice. Always consult with a qualified healthcare professional before making any changes to your diet, lifestyle, or health regimen. The author and publisher are not responsible for any consequences resulting from the use of this information, and readers assume full responsibility for their actions based on it.*

## Evidence-based Expertise

AI-driven hydroponic platform for home settings



The microgreens market is experiencing significant growth, driven by the increasing adoption of indoor and vertical farming techniques.

These methods allow for efficient crop production in limited spaces, particularly in urban environments.

Vertical farming is expected to expand tenfold in the next five years, from 204,387 sq m to 2 million sq m globally, according to Bayer.

Technological advancements, particularly the integration of Artificial Intelligence (AI), are

revolutionizing microgreens production.

AI-powered systems monitor growth, alert to issues, and optimize harvest times.

A notable example is GOhydro, an Attiki-based company that developed a smart-sensing, AI-driven hydroponic platform for home use in February 2021.

GOhydro's system analyzes factors influencing the growth and nutritional value of microgreens like basil, coriander, and parsley, correlating them with environmental and cultivation requirements.

This technology uses various sensors to monitor and optimize growing conditions.

The innovations exemplified by GOhydro represent a significant trend in the microgreens market, potentially applicable to large-scale traditional agriculture and diverse growing environments in the future.

Source: A smart-sensing AI-driven platform for scalable, low-cost hydroponic units | ICT-AGRI-FOOD Meta Knowledge Base. (2024). Ictagrifood.eu.  
<https://www.ictagrifood.eu/node/44643>

## Cultivation Techniques

### Seeding Innovation: The Little Green Seeding Machine



Imagine transforming your microgreens operation, gaining extra hours to expand your business, or enjoying more personal time.

The little green seeding machine could make this a reality.

Designed for all popular microgreen varieties, this tool seeds faster and more evenly

than hand-seeding, enhancing crop uniformity and reducing disease risks.

Curious about how it works? It can handle up to 300 trays per hour, revolutionizing your seeding process.

Ready to join the microgreens revolution?

Pre-order your little green seeding machine today!

Source: <https://youtu.be/MHS25yy4eRw>

### In-house hydroponic garden at the University Club of Portland



The University Club of Portland has introduced an innovative in-house hydroponic garden spearheaded by Executive Chef Adam Schuller.

This sustainable gardening method allows for the growth of plants without soil, utilizing mineral nutrient solutions to accelerate growth in a controlled environment.

The fourth-floor garden features eight trays for microgreens and two hydroponic systems with over 70 pots for herbs and greens, thereby emphasizing the Club's commitment to fresh, locally sourced ingredients.

Chef Schuller aims to expand this project, enhancing the member experience by potentially adding more systems and a relaxing area to engage with the plants.

This initiative not only enriches the culinary offerings with garden-fresh flavors but also lowers the carbon footprint by minimizing reliance on external suppliers, aligning with the Club's sustainability objectives.

Source: Sowerby, A. (2024, August 7). Discover the University Club's new hydroponic garden. University Club of Portland.  
<https://www.linkedin.com/pulse/discover-university-clubs-new-hydroponic-garden-ucpdx-e5r4cl>

## Emerging Industry News

### Frozen Food Industry Group Strives to Reduce Storage Temperature Standards by 3°C



The Move to  $-15^{\circ}\text{C}$  initiative aims to lower frozen food storage and transportation temperatures from  $-18^{\circ}\text{C}$  to  $-15^{\circ}\text{C}$ .

This change, supported by scientific evidence, could significantly reduce carbon emissions, energy consumption, and costs throughout the frozen food supply chain without compromising food safety or quality.

Major industry players have joined the coalition, which has

more than doubled its membership since 2023.

While this initiative directly impacts frozen foods, it may have ripple effects on the fresh produce industry, including microgreens.

For microgreens growers, the initiative's focus on sustainability and energy efficiency could influence market dynamics and consumer preferences.

Although microgreens aren't frozen, advancements in cold chain logistics might lead to innovations benefiting fresh produce transportation.

The industry-wide emphasis on sustainability could provide opportunities for microgreens growers to highlight their environmentally friendly practices.

Additionally, increased consumer awareness about food storage temperatures might necessitate more education on the proper handling of fresh microgreens.

As the frozen food industry evolves, microgreen producers may need to adapt to changing market conditions and leverage the growing interest in sustainable food systems to their advantage.

The initiative underscores a broader trend towards optimizing energy use and reducing environmental impact across the entire food industry, presenting both challenges and opportunities for all sectors, including fresh produce like microgreens.

Source: Department-News Bites | August/September 2024 | Food Safety Magazine. (2024). Food-Safety.com. [https://digitaledition.food-safety.com/august-september-2024/department-news-bites/?oly\\_enc\\_id=5222C4594489F1Z](https://digitaledition.food-safety.com/august-september-2024/department-news-bites/?oly_enc_id=5222C4594489F1Z)

## Commercial Best Practices

Microgreens on Mainstreet:  
Now Available at Safeway

Kalera, a leader in Controlled Environment Agriculture (CEA),

is introducing three new microgreen varieties to Safeway stores in Aurora, Colorado.



The partnership will bring Pea Tendrils, Radiant Mix, and Spicy Mix to shoppers, offering fresh, flavorful, and nutrient-dense options for enhancing meals.

Kalera's microgreens are produced using cutting-edge CEA practices, which result in environmentally sustainable produce grown with minimal land and water usage and without pesticides or GMOs.

The company's hyper-local approach in Aurora ensures faster delivery from farm to

table, reducing carbon footprint and maintaining freshness.

These microgreens boast an impressive 12-14 day shelf-life and are packaged in vented clamshells for optimal longevity.

CEO Jim Leighton emphasized Kalera's commitment to providing high-quality, sustainably grown produce.

The company's innovative farming methods use 99 percent less land and 92 percent less water than traditional farming, aligning with growing consumer demand for environmentally responsible food options.

This partnership with Safeway represents a significant step in bringing Kalera's advanced CEA technology and locally-grown microgreens to a broader consumer base.

Source: Kalera Sustainably Grown Microgreens Now Available at Safeway; Jim Leighton Comments. Mon. August 5th, 2024 - by Chandler James.

<https://m.andnowuknow.com/behind-greens/kalera-sustainably-grown-microgreens-now-available-safeway-jim-leighton/chandler-james/92595>

## Successful Marketing of Microgreens: The Guide and Templates



**ORDER NOW!**

## Learn all the essential aspects of growing microgreens successfully!



**Instructor: M.S. Karla Garcia**

- Hort Americas Technical Service
- Master in Plant Sciences from The University of Arizona
- Recognition by ISHS in strawberry hydroponic research
- Editor: Book Roadmap to Growing Leafy Greens and Herbs
- CEO at Microgreens FLN

**This product is a digital download of the class. It's NOT a LIVE class.**

**REGISTER**

**MORE INFORMATION AT [WWW.MICROGREENSWORLD.COM](http://WWW.MICROGREENSWORLD.COM)**



**Transform Your Home into  
a Nutrient-Packed  
Superfood Haven**

Your 9-Day Blueprint to Microgreen Mastery

**GET THE BOOK!**

**MORE INFORMATION AT [WWW.MICROGREENSWORLD.COM](http://WWW.MICROGREENSWORLD.COM)**



Brought to you by **Doc Green**, Andrew Neves' personally trained AI assistant. "You may ask me anything about microgreens."

**Publisher:** Microgreens World

**Editor:** D. Andrew Neves, [andrew.neves@microgreensworld.com](mailto:andrew.neves@microgreensworld.com)

**Advertising:** [marketing@microgrenworld.com](mailto:marketing@microgrenworld.com)

**Guest Posting:** [marketing@microgrenworld.com](mailto:marketing@microgrenworld.com)