Volume 2024 Number 38 MICROGREENS WORLD Monday October 14 2024

WEEKLY DIGEST

JOINT PAIN? TRY NATURE'S ANTI-INFLAMMATORY SUPERFOOD

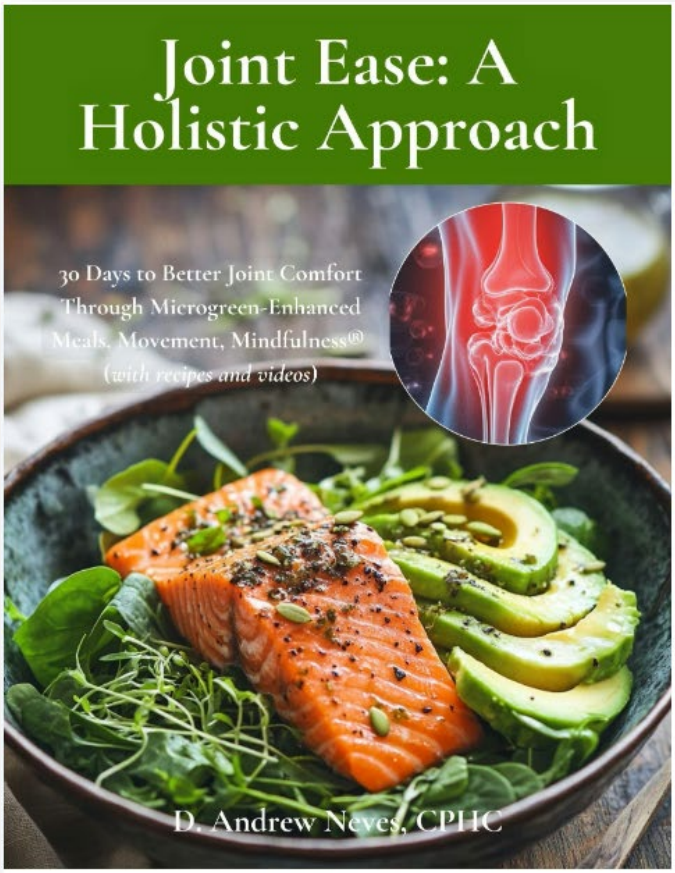
A MUST FOR ALL ESTABLISHED AND ASPIRING MICROGREENS GROWERS: PENN STATE`S NEW PROJECT FOR FARMING SUCCESS

CREATIVE RECIPES: Creaky Joint Power Bowl
NUTRITION SCIENCE: Supercharged Health: Red Cabbage Microgreens Pack Powerful Punch!
EVIDENCE-BASED EXPERTISE: Soilless Microgreens: Nutritious Urban Powerhouses

"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.

Joint Pain? Try Nature's Anti-Inflammatory Superfood

Vol. 2024 No. 38 Monday, October 14, 2024



~~$7.00~~ $3.99

30 Days to Joint Ease

Tired of inflammation ruling your life? Discover nature's secret weapon against joint pain.

This revolutionary guide reveals how tiny microgreens can **combat inflammation and transform your health in just 30 days**.

Learn the simple daily habits that could change everything. Don't let another day of discomfort pass you by.

Grab your copy now and reclaim the active life you deserve.

Your joints will thank you.

GET IT NOW!

Nutrition Science

Supercharge Your Health: Red Cabbage Microgreens Pack Powerful Punch!

Hey there, health enthusiasts! Let's talk about a tiny powerhouse that's making waves in the nutrition world: *red cabbage microgreens*.

These little guys are like nature's multivitamins, and I've got some exciting news about how to make them even more potent.

A recently published study has uncovered a game-changing method to boost the sulforaphane content in red cabbage microgreens.

Now, you might be wondering, "What's sulforaphane?"

Well, it's a compound that's got scientists buzzing about its potential to fight cancer and reduce inflammation.

Pretty impressive, right?

Here's the scoop: *researchers found that by growing red cabbage microgreens in cocopeat (a sustainable growing medium) and watering them with young coconut water, they could double the sulforaphane content.*

That's like getting two for the price of one in the health department!

This research paper explores how different planting media and nutrition solutions can affect the growth and sulforaphane content of red cabbage microgreens. The study found that using cocopeat as a planting media in combination with young coconut water as a nutrient solution resulted in a significant increase in the sulforaphane content, doubling the amount compared to other treatment combinations. This finding suggests that these specific growing conditions can potentially enhance the health benefits of red cabbage microgreens by increasing their sulforaphane content.

But wait, there's more!

This magical combination didn't just amp up the sulforaphane. It also helped the microgreens grow taller and heavier.

Talk about a win-win situation.

Now, I know what you're thinking. "This sounds great, but how can I use this information?"

Well, if you're into growing your own microgreens (and if you're not, maybe it's time to start!), consider switching to cocopeat as your growing medium and using young coconut water instead of plain water!

Your body will thank you for the extra nutrient boost.

Remember, small changes can lead to big results.

By incorporating these supercharged red cabbage microgreens into your diet, you're taking a simple yet powerful step toward better health.

So why not give it a try?

Your taste buds and your body will be glad you did!

T Septirosya, D Septiana, Oktari, R. D., B Solfan, & E Aryanti. (2024). Sulforaphane content enhancement of red cabbage microgreens by using different planting media and nutrition solutions. IOP Conference Series. Earth and Environmental Science, 1302(1), 012016–012016. https://doi.org/10.1088/1755-1315/1302/1/012016

Creative Recipes

Creaky Joint Power Bowl

This vibrant meal combines nutrient-rich ingredients with a variety of microgreens specifically chosen for their potential benefits in supporting joint health and managing arthritis symptoms.

Recipe Information

- *Prep Time*: 15 minutes
- *Cook Time*: 20 minutes
- *Total Time*: 35 minutes
- *Category*: Main Dish
- *Method*: Stovetop and Assembly
- *Cuisine*: Fusion
- *Yield*: 2 servings

Ingredients

- 1 cup quinoa, cooked
- 1 cup roasted sweet potatoes, cubed
- 1/2 cup black beans, cooked
- 1/4 cup pomegranate seeds
- 1/4 avocado, sliced
- 2 tbsp pumpkin seeds
- 1/4 cup broccoli microgreens
- 1/4 cup kale microgreens
- 1/4 cup sunflower microgreens
- 2 tbsp extra virgin olive oil
- 1 tbsp lemon juice
- Salt and pepper to taste

Preparation

1. Cook quinoa according to package instructions and set aside.
2. Roast sweet potato cubes in the oven at 400°F (200°C) for 20 minutes or until tender.
3. In a small bowl, whisk together olive oil, lemon juice, salt, and pepper to make the dressing.
4. In two serving bowls, divide the quinoa, roasted sweet potatoes, and black beans.
5. Top with pomegranate seeds, avocado slices, and pumpkin seeds.
6. Add a generous handful of each type of microgreen on top.
7. Drizzle the dressing over the bowls just before serving.

Plating

Arrange the ingredients in sections around the bowl, creating a colorful and appetizing presentation.

Place the microgreens on top as the final layer, allowing their vibrant colors and delicate textures to be the focal point of the dish.

Benefits of the specific microgreens for preventing arthritis or managing joint health:

1. Broccoli microgreens: Rich in sulforaphane, which has been shown to have anti-inflammatory effects and may help protect against cartilage destruction in osteoarthritis (Davidson et al., 2013).
2. Kale microgreens: High in vitamin K, which is important for bone health and may help reduce inflammation in the joints (Misra et al., 2013).
3. Sunflower microgreens: Excellent source of vitamin E, which has antioxidant properties that may help reduce oxidative stress in the joints (Yin et al., 2024).

Community News

Green Revolution: Local Family's Hydroponic Farm Shocks Experts

The 4 Word Farm is a commercial hydroponic operation run by Eric and Becky Hudrlik near Nevis, Minnesota.

Started in July 2021, it's Hubbard County's only commercial hydroponic farm.

The Hudrliks grow various lettuces, herbs, and microgreens in a greenhouse using a nutrient-rich water system.

They also have outdoor garden plots for root vegetables and other produce.

The farm utilizes sustainable practices, avoiding chemical pesticides and herbicides.

The Hudrliks sell their produce at local farmer's markets, with lettuce and microgreens being their best sellers.

The article highlights the advantages of hydroponic farming, including higher yields, fewer pests, and water efficiency.

The COVID-19 pandemic influenced the farm's inception, as Eric left his previous job to pursue full-time gardening.

For microgreens growers, there is potential for successful small-scale hydroponic operations in rural areas.

It showcases the growing demand for locally produced, fresh greens and the viability of hydroponic farming as a business model.

Geisen, S. (2024, October 6). Nevis family launches hydroponic gardening enterprise. *Park Rapids Enterprise*. https://www.parkrapidsenterprise.com/lifestyle/nevis-family-launches-hydroponic-gardening-enterprise

Mayo Clinic Café's Secret Garden Revolutionizes Patient Dining!

The Mayo Clinic in Rochester, Minnesota, has implemented a hydroponic micro-farm in its Dan Abraham Healthy Living Center Café, harvesting about 100 pounds of ultra-fresh vegetables since its launch earlier this year.

This innovative approach to "locally grown" produce allows the café to cultivate lettuces, microgreens, and herbs right behind the entrée station, visible to customers.

The hydroponic system uses a water-based nutrient solution instead of soil. It is managed through an app that monitors growth, water needs, and pH levels.

This initiative aligns with the health-focused mission of the center, which has led to increased foot traffic in the café.

The micro-farm not only provides fresh ingredients for sandwiches, salads, and bowls but also serves as a conversation piece.

The success of this pilot project may lead to expansion across other Mayo Clinic campuses.

For Morrison Healthcare, the food service provider, the focus is on enhancing the dining experience and promoting local, sustainable food production rather than purely financial returns.

This development has implications for microgreens growers, as it demonstrates the feasibility of on-site hydroponic farming in institutional settings.

It could potentially reduce demand for externally sourced

microgreens and herbs, encouraging traditional growers to adapt their business models or explore partnerships with healthcare facilities and other institutions interested in implementing similar systems.

Source: Lalley, H. (2024, October 7). How the Mayo Clinic is bringing new meaning to 'locally grown.' FoodService Director. https://www.foodservicedirector.com/sustainability/how-mayo-clinic-bringing-new-meaning-locally-grown

Certified Naturally Grown's List of Winter Conferences

Certified Naturally Grown

Conference season is about to be in full swing!

Farm conferences are a wonderful way to learn and connect with growers in a vibrant regional context.

Below is a short list of conferences aligned with CNG's sustainable farming ethos.

Make sure to tag us in your conference photos @cngfarming!

November 2-3, 2024 – Durham, NC	Carolina Farm Stewardship Association (CFSA)
November 15-16, 2024 – Vancouver, WA	Tilth Alliance Conference
December 17-19, 2024 – Manchester, NH	New England Vegetable and Fruit Conference (NEVF)
January 10-12, 2025 – Roanoke, VA	Virginia Association for Biological Farming Conference (VABF)
January 17-18, 2025 – Silver Spring, MD	Future Harvest
January 23-25, 2025 – Frankfort, KY	Organic Association of Kentucky Annual Farming Conference (OAK)
January 24-25, 2025 – Montrose, CO	Western Co. Health, Food & Farm Forum
January 29th-February 1st, 2025 – Hot Springs, AR	Arkansas Grown Conference & Expo
February 4-6, 2025 – Atlanta, GA	SOWTH
February 5-7, 2025 – Lancaster, PA	PASA Sustainable Agriculture Conference
February 13-15, 2025 – Newark, Ohio	Ohio Ecological Food and Farming Association Conference
February 15, 2025 – Burlington, VT	Northeast Organic Farming Association of Vermont (NOFAVT)

Source: Certified Naturally Grown. (2024, October 2). Certified Naturally Grown's List of Winter Conferences. https://www.naturallygrown.org/certified-naturally-growns-list-of-winter-conferences/

Evidence-based Expertise

Soilless Microgreens: Nutritious Powerhouses for Urban Agriculture

This new study looked at how growing microgreens in burlap instead of soil affected their size, nutritional content, and ability to act as antioxidants.

The researchers focused on microgreens from three plant families:

- **Brassicaceae**: This family includes vegetables like broccoli, cabbage, and radishes.
- **Amaranthaceae**: This family includes vegetables like beets and spinach.
- **Linaceae**: This family includes flax.

Here's a breakdown of what they studied:

- **Morphological traits:** This refers to the physical characteristics of the microgreens, such as their height, weight, and leaf size.

- **Biochemical composition:** This refers to the chemical makeup of the microgreens, such as their protein, fiber, and vitamin content.
- **Antioxidant activities:** The researchers wanted to see how well the antioxidants in microgreens could fight off these dangerous free radicals.

Key findings include:

- Microgreens vary in size, nutrition, and antioxidant levels. Radish sango microgreens were the largest.
- Broccoli, cabbage, and radish microgreens are nutritional powerhouses packed with beneficial compounds and antioxidants.
- Soil-grown microgreens had slightly higher levels of nutrients but also more antinutrients.
- Burlap is a cost-effective way to grow microgreens, especially in cities.

They found that the type of growing medium (burlap vs. soil) did have a significant impact on these factors.

For instance, microgreens grown in burlap had a higher moisture content but lower levels of ash, fat, fiber, and protein compared to those grown in soil.

The results suggest soilless cultivation can produce high-quality microgreens with comparable nutritional profiles to soil-grown ones.

This has implications for sustainable urban farming practices and enhancing nutrient-dense food production in limited spaces.

Gunjal, M., Rasane, P., Singh, J., Kaur, S., Nanda, V., Ullah, R., Iqbal, Z., & Ercisli, S. (2024). Assessment of bioactive compounds, antioxidant properties, and morphological parameters in selected microgreens cultivated in soilless media. Scientific Reports, 14, Article 23605. https://doi.org/10.1038/s41598-024-73973-w

FEATURED ARTICLE

Joint Pain? Try Nature's Anti-Inflammatory Superfood

Remember when you could bound up the stairs without a second thought?

Or sprint across the field without your knees screaming in protest?

If those memories feel like ancient history, you're not alone.

I've been there, and so has half my family.

The Joint Pain Epidemic: A Family Affair

As an ex-athlete with two sons in pro sports, joint health isn't just a passing concern in our household—it's a daily conversation.

My wife's arthritic shoulders, my father's trick knee, and my own neck that pops like bubble wrap on a cold morning... we're a veritable symphony of creaky joints.

But here's the kicker: what if I told you that the solution to our collective aches might be hiding in plain sight, masquerading as a humble garnish on your plate?

The Tiny Green Revolution

It all started when my brother-in-law, a former half-marathon runner, began complaining about his knees.

As we searched for solutions, we stumbled upon something unexpected: microgreens.

These tiny powerhouses are like nature's multivitamins, packed with more nutrients than you can shake a stick at.

And when it comes to joint health, they're the unsung heroes we've been overlooking.

Why Your Joints Are Singing the Blues

Before we dive into how microgreens can help, let's talk about why your knees might be throwing a fit in the first place.

Our joints are like the hinges on a well-oiled door.

But over time, that oil starts to dry up.

Add in the wear and tear from years of use (or overuse if you're an athlete like me), and you've got a recipe for creaky, achy joints.

The Inflammation Connection

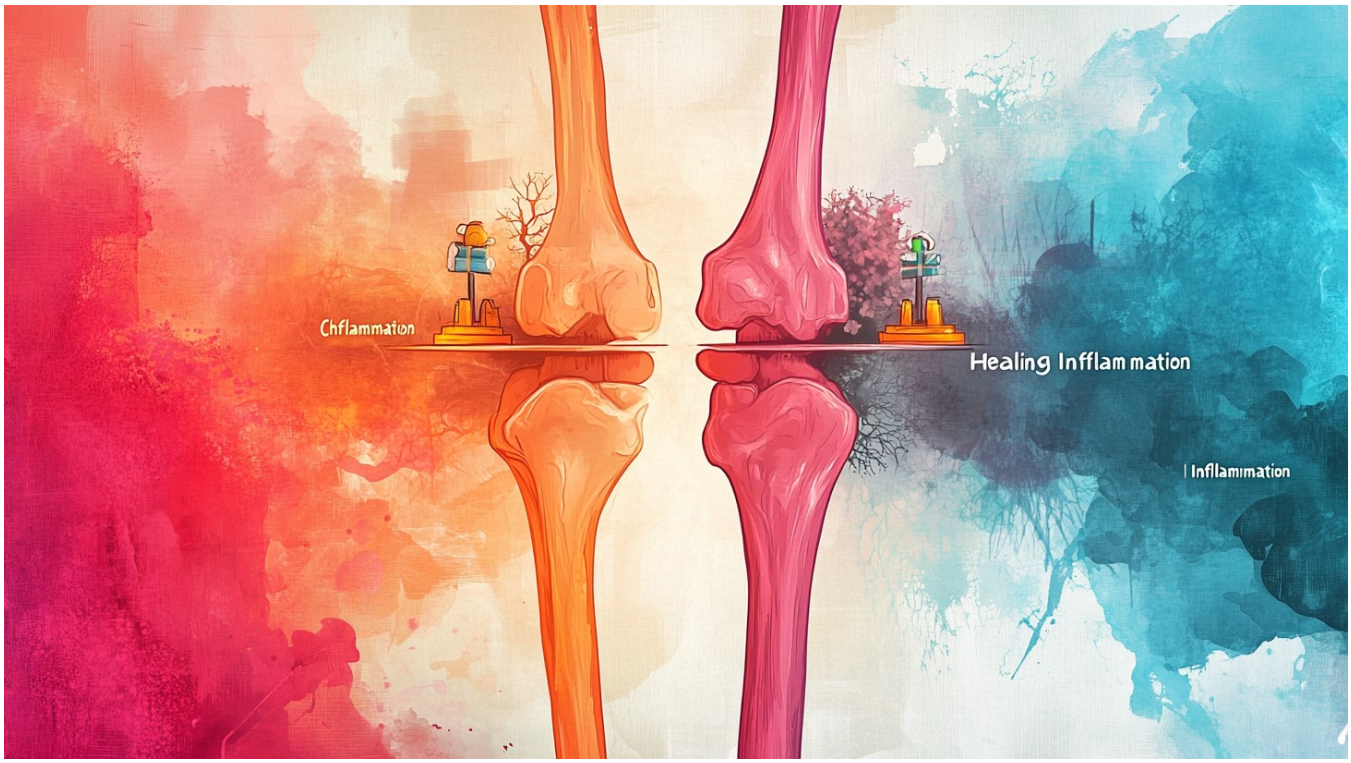
Here's where it gets interesting. Inflammation is like a double agent in our bodies.

On one hand, it's our body's way of healing.

On the other, when it sticks around too long, it starts causing trouble - especially for our joints.

Enter microgreens, stage left.

Nature's Anti-Inflammatory Arsenal



Microgreens are the Special Forces of the plant world.

They're packed with antioxidants and anti-inflammatory compounds that make them a formidable ally in the fight against joint pain.

But here's the real game-changer: microgreens can contain up to 40 times more nutrients than their fully-grown counterparts.

That's like getting a whole garden's worth of goodness in every bite.

A study by Xiao et al. (2012) found that microgreens contained significantly higher levels of vitamins and carotenoids compared to their mature counterparts.

The Nutrient Cocktail Your Joints Are Begging For

Let's break it down:

Vitamin C	Not just for colds, folks. This vitamin is crucial for collagen production, which is like the scaffolding for your joints. Research by Ripani et al. (2019) showed that vitamin C plays a vital role in joint health and collagen synthesis.
Vitamin K	Think of this as the project manager for your bone health. It keeps everything running smoothly. A study by Misra et al. (2013) highlighted the importance of vitamin K in maintaining bone and cartilage health.
Omega-3s	These fatty acids are like peacekeepers, helping to calm down inflammation in your body. Calder (2015) reviewed the anti-inflammatory effects of omega-3 fatty acids, particularly in relation to joint health.
Sulforaphane	Found in broccoli microgreens, this compound is like a bodyguard for your cartilage, potentially slowing down the wear and tear. Davidson et al. (2013) demonstrated the potential of sulforaphane in protecting against osteoarthritis.

From Skeptic to Believer: Our Family's Journey

I'll be honest—when my wife first suggested we try incorporating microgreens into our diet, I was skeptical.

But after a month of sprinkling these nutrient-dense greens on everything from our morning eggs to our evening salads, the difference was noticeable.

My neck felt less stiff, my wife's hands were more flexible, and even my father reported less knee pain after his daily walks.

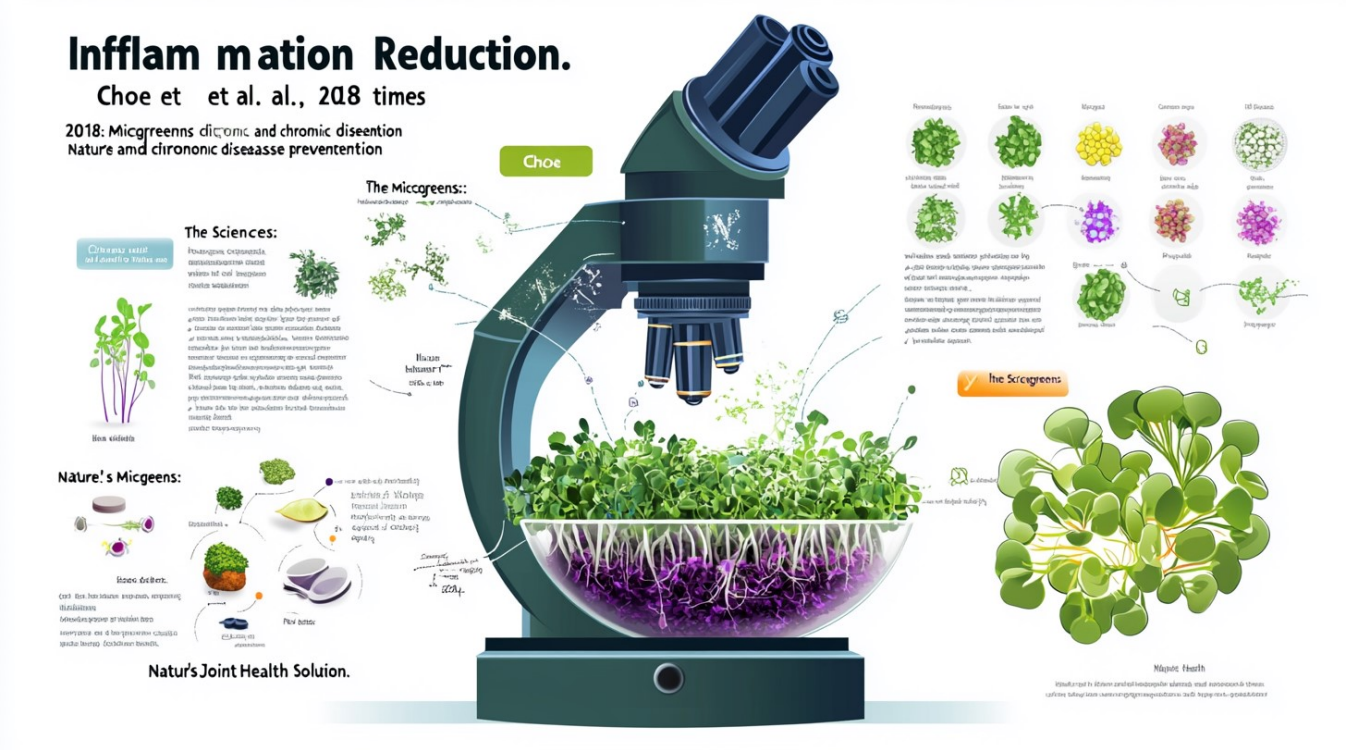
It wasn't a miracle cure, but it was a significant improvement.

The Science Backs It Up

Recent studies have shown promising results when it comes to the anti-inflammatory effects of compounds found in microgreens.

While we're not claiming they're a panacea, the evidence suggests they could be a powerful tool in your joint health arsenal.

A review by Choe et al. (2018) highlighted the potential of microgreens in preventing various chronic diseases due to their high antioxidant content.



Another study by Sun et al. (2013) found that microgreens could be a good source of polyphenols, which are known for their anti-inflammatory properties.

How to Harness the Power of Microgreens

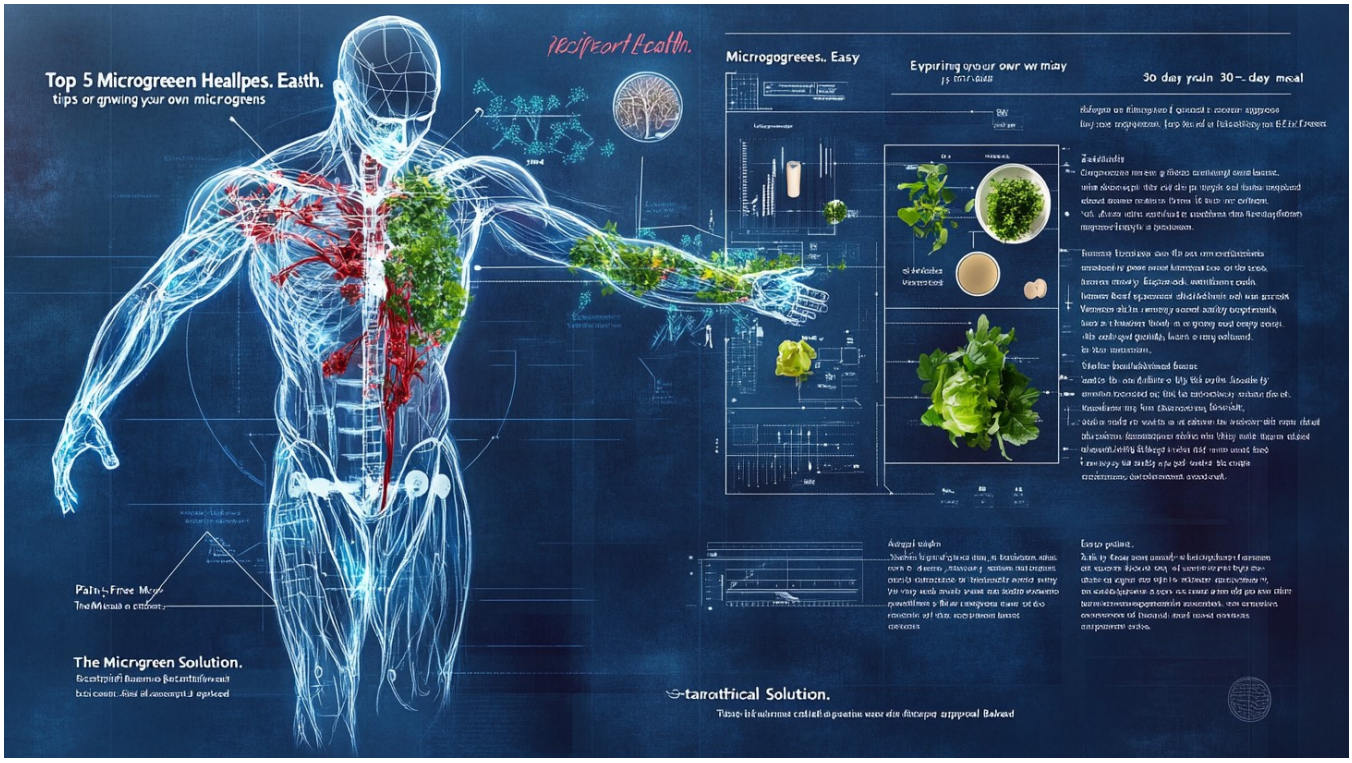
Now, you might be thinking, "Great, but how do I actually use these tiny greens?"

That's where things get exciting.

From sprinkling them on your morning eggs to blending them into smoothies, the possibilities are endless.

But here's the thing: knowing which microgreens pack the biggest punch for joint health and how to incorporate them effectively into your diet takes a bit of know-how.

Your Blueprint for Pain-Free Movement



That's why I've put together a comprehensive guide on "Microgreens and Joint Health: Your Blueprint for Pain-Free Movement." In it, you'll discover:

- The top 5 microgreens scientifically proven to support joint health
- Easy, delicious recipes that make incorporating microgreens a breeze
- A 30-day meal plan designed to maximize the anti-inflammatory benefits of microgreens
- Expert tips on growing your own nutrient-packed microgreens at home

A Family Legacy of Health

As I watch my sons on the field, I can't help but think about the long-term health of their joints.

By incorporating microgreens into our family's diet now, we're not just addressing our current aches and pains—we're investing in our future mobility.

The Best Time to Start? Now

Here's the crucial part: the best time to start caring for your joints was 20 years ago.

The second-best time? Right now.

Every day you wait is another day, and inflammation could be chipping away at your joint health.

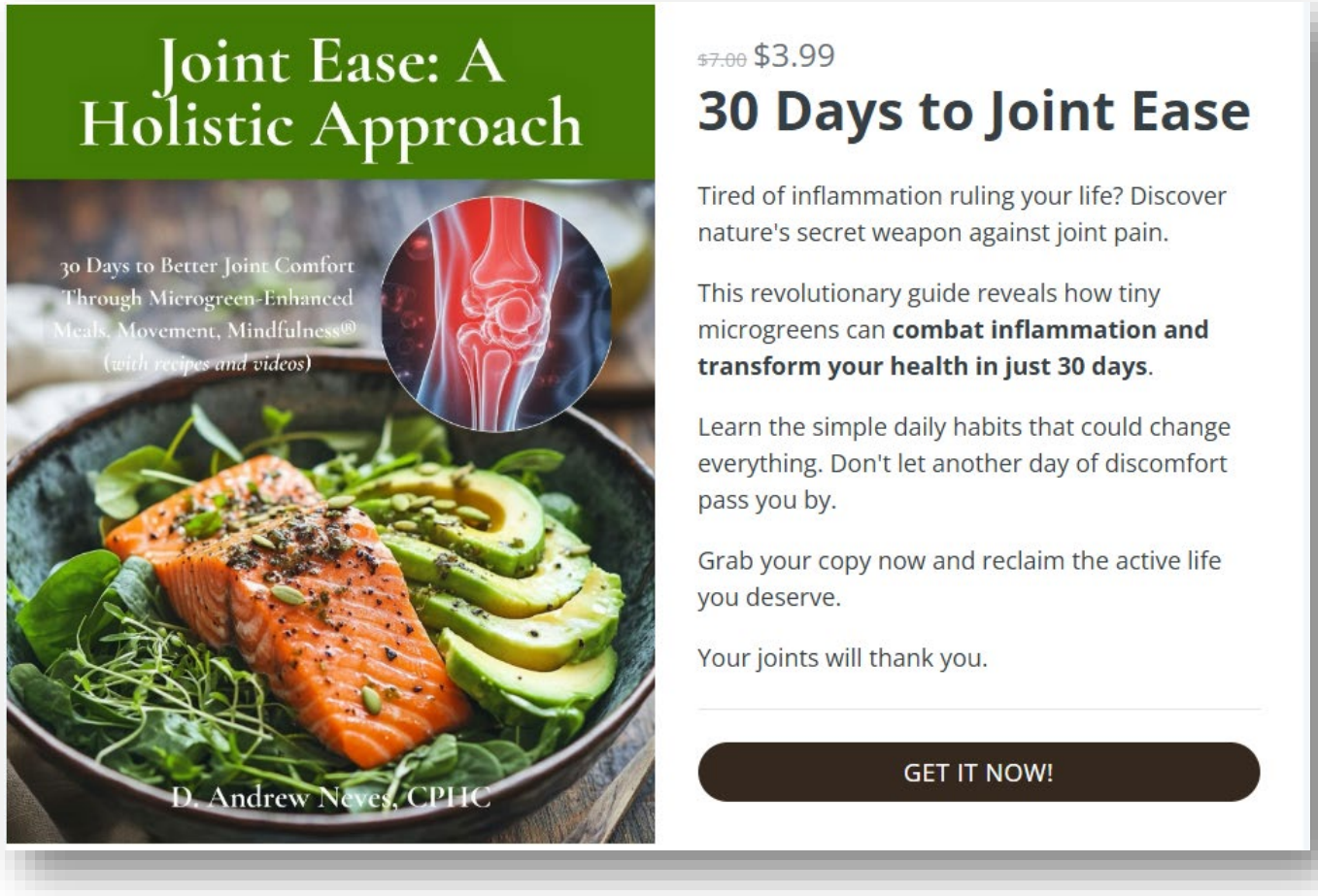
Don't let joint pain hold you back from living your best life.

It's time to harness the power of these tiny greens and give your joints the support they deserve.

Remember, your journey to better joint health could be just a sprout away.

Are you ready to take the first step towards pain-free movement?

Get your hands on "**Microgreens and Joint Health: Your Blueprint for Pain-Free Movement**" today, and start your journey towards healthier, happier joints.



Your future self (and your knees) will thank you.

References

Calder, P. C. (2015). Marine omega-3 fatty acids and inflammatory processes: Effects, mechanisms, and clinical relevance. *Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids*, 1851(4), 469–484. https://doi.org/10.1016/j.bbalip.2014.08.010

Choe, U., Yu, L. L., & Wang, T. T. Y. (2018). The Science Behind Microgreens as an Exciting New Food for the 21st Century. Journal of Agricultural and Food Chemistry, 66(44), 11519–11530. https://doi.org/10.1021/acs.jafc.8b03096

Davidson, R. K., Jupp, O., de Ferrars, R., Kay, C. D., Culley, K. L., Norton, R., Driscoll, C., Vincent, T. L., Donell, S. T., Bao, Y., & Clark, I. M. (2013). Sulforaphane represses matrix-degrading proteases and protects cartilage from destruction in vitro and in vivo. Arthritis and Rheumatism, 65(12), 3130–3140. https://doi.org/10.1002/art.38133

Misra, D., Booth, S. L., Tolstykh, I., Felson, D. T., Nevitt, M. C., Lewis, C. E., Torner, J., & Neogi, T. (2013). Vitamin K Deficiency Is Associated with Incident Knee Osteoarthritis. The American Journal of Medicine, 126(3), 243–248. https://doi.org/10.1016/j.amjmed.2012.10.011

Ripani, U., Manzarbeitia-Arroba, P., Guijarro-Leo, S., Urrutia-Graña, J., & De Masi-De Luca, A. (2019). Vitamin C May Help to Reduce the Knee's Arthritic Symptoms. Outcomes Assessment of Nutriceutical Therapy. *Medical Archives*, 73(3), 173–177. https://doi.org/10.5455/medarh.2019.73.173-177

Sun, J., Xiao, Z., Lin, L., Lester, G. E., Wang, Q., Harnly, J. M., & Chen, P. (2013). Profiling Polyphenols in Five Brassica Species Microgreens by UHPLC-PDA-ESI/HRMSn. Journal of Agricultural and Food Chemistry, 61(46), 10960–10970. https://doi.org/10.1021/jf401802n

Xiao, Z., Lester, G. E., Luo, Y., & Wang, Q. (2012). Assessment of vitamin and carotenoid concentrations of emerging food products: Edible microgreens. Journal of Agricultural and Food Chemistry, 60(31), 7644-7651. https://doi.org/10.1021/jf300459b

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.

Cultivation Techniques

A Must For All Established and Aspiring Microgreens Growers: Penn State's New Project for Farming Success

Penn State's College of Agricultural Sciences has launched a new project to support microgreens producers with risk management education.

Funded by the USDA, the program aims to help established and aspiring growers tackle challenges in microgreen production, such as maintaining quality, ensuring food safety, managing disease, financing, and finding reliable markets.

The project will feature monthly webinars covering production issues, marketing, business planning, food safety, and legal aspects, along with two local workshops for hands-on training.

The initiative is unique in its comprehensive approach, addressing not only production issues but also business planning, marketing, and legal considerations.

The educational series begins on October 24 with a free webinar exploring the commercial and nutritional value of microgreens.

This program has significant implications for microgreens growers.

It offers essential risk management strategies to help them thrive in a competitive sector and diversify their

operations to meet growing market demands.

When: October 24, 2024 (12:00 PM-1:00 PM ET)

Registration deadline: October 23, 2024, 11:45 p.m.

About The Live Webinar

Unlock the potential of your microgreens business by joining our upcoming webinar.

Led by Francesco Di Gioia, Associate Professor of Vegetable Crop Science at Penn State, this session is the first in a series designed to help agricultural producers navigate the complexities of microgreens production.

Participants will explore essential topics, including defining microgreens quality, maintaining consistency in commercial standards, and managing nutritional aspects alongside market strategies.

With the growing demand for microgreens due to their health benefits and potential as nutraceutical products, Dr. Di Gioia will also address the opportunities and risks associated with making nutritional claims.

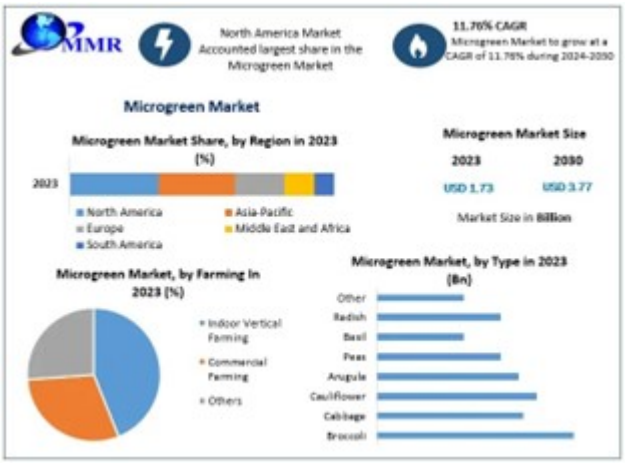
Don't miss this opportunity to deepen your knowledge of microgreens production!

REGISTER

Source: Penn State. (2024, October 8). New project to support microgreens producers with risk management education. *Penn State News*. https://www.psu.edu/news/agricultural-sciences/story/new-project-support-microgreens-producers-risk-management-education

Emerging Industry News

Microgreen Market Is Forecasted To Expand To USD 3.77 Billion By 2030



The article discusses the growth and trends in the microgreens market, which is forecasted to expand to USD 3.77 billion by 2030.

Microgreens have gained popularity in culinary applications due to their unique flavors, vibrant colors, and nutritional benefits.

The market is driven by increasing health consciousness, demand for organic produce, and the use of microgreens in

both high-end dining and home cooking. North America dominates the market, with the United States leading in production.

Key drivers include growing awareness of health benefits, incorporation into various dishes, and technological innovations in indoor vertical farming.

However, challenges such as higher prices and shorter shelf life exist.

The market is segmented by type (e.g., broccoli, cabbage, cauliflower), farming method, distribution channel, and end-use.

For microgreens growers, this implies opportunities for expansion, particularly in indoor vertical farming and product diversification.

The growing demand in urban areas and increasing use of food services suggest the potential for market growth.

However, growers may need to address challenges related to pricing and shelf life to remain competitive.

Source: Godage, L. (2024, October 8). Microgreen Market Is Forecasted To Expand To USD 3.77 Billion By 2030 As Revealed In New Report. WhaTech. https://www.whatech.com/og/markets-research/agriculture/891744-microgreen-market-is-forecasted-to-expand-to-usd-3-77-billion-by-2030-as-revealed-in-new-report

FDA Cracks Down: Your Food Packaging May Be Toxic

The article discusses recent developments in food packaging regulations and safety assessments, particularly focusing on the FDA's efforts to enhance its post-market evaluation of chemicals in food.

The FDA has proposed a new organizational structure for its Human Foods Program.

It is also developing an enhanced systematic process for post-

market assessment of food chemicals.

The agency is reviewing select chemicals in the food supply, including per- and polyfluoroalkyl substances (PFAS).

It has taken action to end the sale of certain PFAS used in U.S. food packaging.

The article also mentions state-level initiatives, such as Maine's Toxic Chemicals in Packaging Law and California's Food Safety Act, which impose additional restrictions on chemicals in food packaging.

For microgreens growers, these developments may have implications for packaging choices.

They should stay informed about regulations on food contact materials and consider alternatives to packaging containing restricted substances like PFAS.

Growers may need to review their current packaging materials and potentially adapt to new requirements to ensure compliance with evolving federal and state regulations.

Source: Misko, G. G. (2024). Packaging. *Food Safety Magazine*, October/November 2024. https://www.food-safety.com/emagazine

Short Course: Hydroponic Leafy Green Production

REGISTER

Unlock the secrets of hydroponic leafy greens (**including microgreens**).

From systems to substrates, nutrients to crop management, this crash course covers it all.

Led by an industry expert, it's your ticket to mastering indoor and greenhouse production.

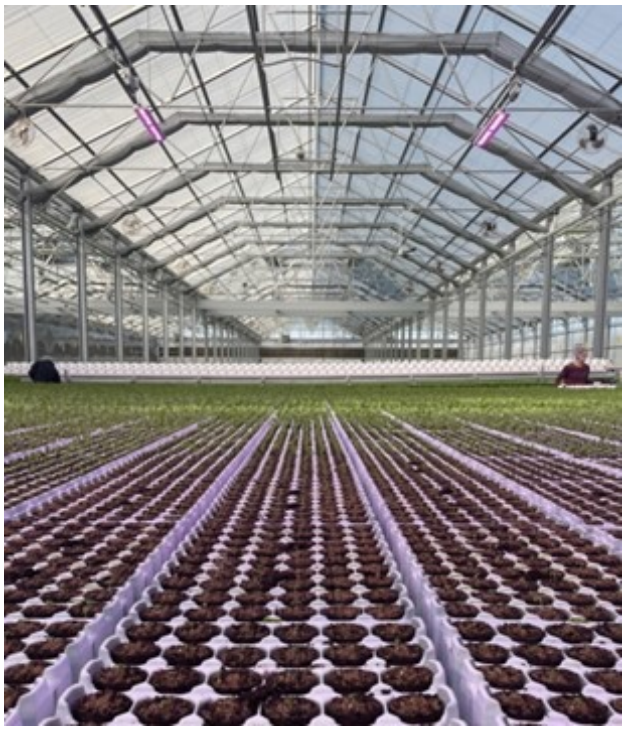
Two hours that could revolutionize your growing game.

Ready to level up?

- DATE: Saturday, October 19, 2024
- Schedule: 10:00 am – 12:00 pm (Central Standard Time)
- Platform: ZOOM US

Commercial Best Practices

Solar-Powered Greens: USDA Grant Slashes Farm's Energy Bills



TrueHarvest Farms, a greenhouse operation in Texas, is utilizing a USDA Rural Energy for America Program (REAP) grant to install a solar photovoltaic system to reduce energy costs.

The company, which grows leafy greens, microgreens, and herbs on 4¼ acres of greenhouses,

faces significant energy expenses.

By implementing this solar array, TrueHarvest Farms expects to save about $80,000 annually on energy costs.

The REAP grant covers up to 50% of the project cost, making it an attractive option for greenhouse operators looking to reduce their energy burden.

The company chose solar power over wind due to aesthetic considerations and the abundance of sunlight in Texas.

TrueHarvest Farms plans to integrate all their greenhouse acreage under the solar array and may consider applying for additional USDA grants for future projects, including the installation of energy-efficient LED grow lights.

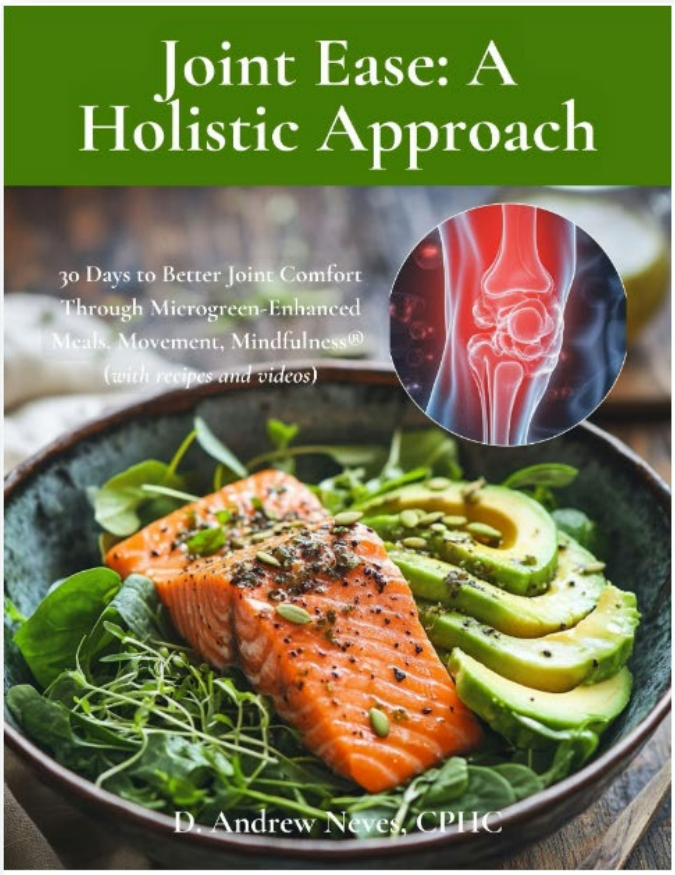
For microgreens farmers seeking to use renewable energy, REAP can be an excellent source of funding.

The program not only helps offset the initial costs of installing alternative energy systems but also supports the implementation of energy-efficient equipment.

This can significantly reduce operational expenses for farmers, making their businesses more sustainable and profitable in the long run.

Additionally, the potential to sell excess energy back to utility providers offers an opportunity for additional income.

Source: Kuack, D. (n.d.). How can USDA help make your greenhouse operation more energy efficient? (Oct 2024). Hort Americas. https://hortamericas.com/blog/news/how-can-usda-help-make-your-greenhouse-operation-more-energy-efficient/



~~$7.00~~ $3.99

30 Days to Joint Ease

Tired of inflammation ruling your life? Discover nature's secret weapon against joint pain.

This revolutionary guide reveals how tiny microgreens can **combat inflammation and transform your health in just 30 days**.

Learn the simple daily habits that could change everything. Don't let another day of discomfort pass you by.

Grab your copy now and reclaim the active life you deserve.

Your joints will thank you.

GET IT NOW!

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

Advertising: marketing@microgrenworld.com

Guest Posting: marketing@microgrenworld.com