# MICROGREENS WEEKLY DIGEST

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## THE HIGHLIGHTS

- Herb microgreens pack 40x more nutrients than mature plants
- Dubai café proves microgreens drive restaurant business success
- LED technology cuts energy costs, doubles crop yields
- Food safety plans prevent 95% of contamination recalls

## UPCOMING EVENTS

Build a $1,500/month Microgreens Business in 90 Days

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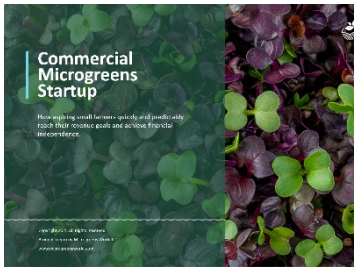



*Twin Cities Veg Fest 2025 Saint Paul, USA*

21.09.2025 - 21.09.2025

Twin Cities Veg Fest is now the biggest plant-based festival in the Midwest USA

## WHAT YOU MISSED THIS WEEK

Herb microgreens just changed the game completely. New research from Rasmi and colleagues proves fenugreek, basil, and mustard microgreens contain 4-40 times more therapeutic compounds than regular varieties. We're talking concentrated medicine you can grow on your windowsill.

Dubai's Growhouse café turned a failed Ikea shelf experiment into a thriving farm-to-table business. Their microgreens operation now supplies multiple restaurant locations while proving indoor farming works in harsh climates.

LED technology keeps getting cheaper and better. Babylon Vertical Farms cut energy costs by 40% while doubling yields. Their Malaysian operation supplies 30+ restaurants with 1,000 weekly trays—and every Michelin-starred restaurant in Kuala Lumpur buys from them.

Food safety reality check: 95% of recalls between 2020-2023 happened because businesses lacked proper contamination prevention plans. Most microgreens operations qualify for small business exemptions, but smart growers implement safety protocols anyway.

Jeremy and Jill Keefe transformed their health with kitchen-grown microgreens, then built Good Living Greens into a 3,000-square-foot community hub.

# NUTRITION SCIENCE

## Herb Microgreens: Nature's Concentrated Medicine Cabinet

Elena stopped by last week. She spotted the tiny fennel shoots on my kitchen counter. "What's the difference between those and your regular microgreens?"

Here's what the latest research from Rasmi and colleagues (2025) confirms: herb microgreens aren't just another trendy green. They're concentrated medicine you can grow on your windowsill.

**The Science Gets Personal**

I used to think microgreens were microgreens. The research shows herb varieties—fenugreek, basil, mustard, fennel, coriander, and moringa—contain therapeutic compounds that regular microgreens can't match. We're talking about plants harvested at 7-21 days that pack 4-40 times more nutrients than mature herbs, compared to regular microgreens that max out at 4-6 times.

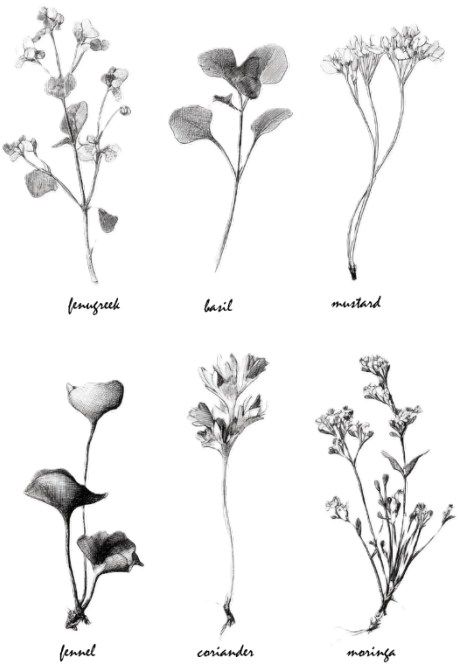
Fenugreek microgreens contain 5.89mg/g of vitamin C—higher than both seeds and sprouts. Basil microgreens deliver 96.3mg/100g of ascorbic acid plus 2.17mg/100g of iron. Mustard microgreens pack 4.0mg per 100 grams of beta-carotene, crushing both baby and mature greens.

Here's why that matters: laboratory studies show fenugreek microgreens improved insulin-mediated glucose uptake by 44% and inhibited diabetes-related enzymes by 70%. Mustard microgreens significantly suppressed liver and breast cancer cells in test conditions.

**What Your Body Actually Gets**

Think of herb microgreens as concentrated multivitamins that taste incredible. Basil microgreens may support brain health through antioxidant activity of 242.78μg/g. Coriander microgreens completely stopped E. coli and Bacillus subtilis growth in laboratory tests—something regular lettuce microgreens can't claim.

The mineral profiles are remarkable. Fennel microgreens contain 480.5mg/100g of potassium for heart health, plus 94.7mg/100g of calcium. Coriander microgreens pack 8.72mg/100g of iron—notably higher than mature plants.




**Growing Made Simple**

Ready to start? Pick three varieties based on your health goals. Blood sugar concerns? Grow fenugreek. Want antioxidant power? Choose basil. Digestive support? Go with fennel.

Use shallow containers with drainage holes. Herb microgreens prefer slightly drier conditions than lettuce varieties—mist daily but don't oversoak. Harvest when cotyledon leaves are fully expanded. That's your sweet spot for maximum nutrition.

**Kitchen Magic**

Elena now grows her own after tasting my fennel microgreen salad dressing. The flavor intensity is remarkable—you need less than regular herbs but get more therapeutic benefit. Add basil microgreens to pasta for antioxidant boost. Toss coriander microgreens into smoothies for iron absorption. Use mustard microgreens as spicy salad toppers.

***Pro tip:*** *these delicate herbs work best added at the end of cooking to preserve heat-sensitive vitamins.*

**The Drying Discovery**

Here's what changed my game: dried herb microgreens. Air-dry your harvest for 2-3 days or use a dehydrator at 95-105°F. You'll have concentrated seasoning that retains therapeutic compounds—way better than store-bought dried herbs.

**Market Reality Check**

The microgreens market is exploding—$1.7 million in 2022 to projected $2.61 million by 2029. But herb varieties remain underexplored commercially. Most research focuses on broccoli and radish microgreens, leaving herb microgreens as hidden gems.

**What We Still Don't Know**

The research reveals gaps. Limited data exists on optimal harvest timing for maximum therapeutic compounds. Bioavailability studies are scarce. Few long-term human studies exist. The laboratory results look promising, but we need clinical trials to confirm health benefits in real people.

**Your Action Plan**

Start this week. Choose fenugreek for metabolic support, basil for antioxidants, or coriander for digestive health. Grow enough to eat fresh daily and dry some for year-round seasoning. Track how you feel after two weeks.

The research shows herb microgreens may offer therapeutic benefits beyond regular microgreens through concentrated bioactive compounds. They're functional foods that could support better health outcomes.

**Sources:** Rasmi, P. K., Dalbhagat, C. G., Venugopal, A. P., Mishra, S., Gowda, N., & Kambhampati, V. (2025). A comprehensive review of herb microgreens as emerging functional foods: Insights into their nutritional potential and health benefits. Preparative Biochemistry & Biotechnology. https://doi.org/10.1080/10826068.2025.2511840

## FUN FACTS

**Yellow Light Metabolics**

Microgreens exhibit species-specific metabolic reprogramming in response to precise LED light wavelengths, with dramatic nutrient fluctuations not seen in mature plants. Broccoli seedlings increase glucose significantly under yellow light.

**Medieval Monk Gardens**

Far-red light significantly increases microgreen biomass accumulation, contrary to traditional beliefs that it only causes stem elongation. Research shows this wavelength triggers unique growth responses in cotyledon-stage plants.

**Ancient Egyptian Superfood**

Ancient Egyptians cultivated young greens along the Nile River thousands of years ago, consuming barley and wheatgrass shoots for their detoxifying properties. What modern health enthusiasts call microgreens was survival food.

# WELCOME NEW MEMBERS

| NAME | CITY | COUNTRY |
|---|---|---|
| Etam Allab | Budapest | Hungary |
| Shailen Dravpathak | Mumbai | India |
| Suntssov Maks | Alblasserdam | Netherlands |
| Peter Huysman | Landgraaf | Netherlands |
| Cindy | San Jose | United States |
| Janneke Scheeres | | |
| Salvador Solis | | |
| Maria Georgiades | | |
| Dhami Amerjeet | | |
| Dale Xedivow | | |

MICROGREENS WORLD
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Doc Green, Your Microgreens Research Assistant

# COMMUNITY CORNER

**Dubai Café Proves Microgreens Drive Business**

What started as a wilted Ikea shelf experiment became The Growhouse—Dubai's first café-farm hybrid that's transforming how restaurants think about supply chains. Necip Camcigil and chef Kelvin Kelly turned failure into opportunity, partnering with LetitGRO to create a controlled growing system that works in Dubai's harsh climate.

The numbers tell the story. Their three-times-larger kitchen now produces everything from scratch for multiple One Life locations. Microgreens became their most productive crop, with alfalfa, broccoli sprouts, and pea shoots directly feeding signature dishes like the Alfalfa Romeo. While the farm can't meet all needs, it reduces dependency on outside suppliers and creates menu differentiation other cafés can't match.

Camcigil's honest about the limitations. "We're not claiming to have solved anything," he says. But the model works. Customers stay longer, drawn by the farm-to-table story they can see upstairs. The space hosts workshops on soil health and composting, turning diners into engaged community members.

For commercial growers, the lesson is clear: diversification matters. The Growhouse grows lettuce, herbs, and larger crops alongside microgreens. Chefs get consistent, ultra-fresh ingredients. Suppliers see a new market model where restaurants become partners, not just customers.

The project proves microgreens work at scale in challenging environments. Other Dubai restaurants are watching. "If others want to build similar models, we're happy to share what we've learned," Camcigil says. That's social proof with serious business implications.

**Source:** Cairoscene.com. (2025). This Dubai café is growing your lunch upstairs. *Cairo Scene.* Retrieved from https://cairoscene.com/LifeStyle/This-Dubai-Caf-is-Growing-Your-Lunch-Upstairs

**LED Lights Turn Microgreens Into Goldmines**

Forget everything you thought about farming. **Babylon Vertical Farms** just proved microgreens can build million-dollar businesses when you pair smart tech with rare varieties.

Eshton Thomas started with zero farming experience. Nine years later, his Malaysian operation supplies 30+ restaurants and produces 1,000 trays weekly. The secret? LED lights that slash energy costs by 40% while doubling crop yields.

LED technology now costs half what it did three years ago. The lights put out twice the energy output. Plants grow 15 times faster than traditional fields because you control everything—temperature, humidity, light spectrum.

The numbers speak volumes. One 12,000-square-foot warehouse produces 200,000 pounds of leafy greens yearly. That matches 80 acres of farmland. Microgreens pack 40 times more nutrients than mature plants, making them worth premium prices at fine-dining establishments.

Thomas discovered the profit sweet spot when Chef Darren Teoh advised him to grow rare varieties nobody else offered. Now Babylon grows 41 different microgreen types, including ulam raja sourced from Kelantan farmers. Every Michelin-starred restaurant in Kuala Lumpur and Penang buys from them.

The tech keeps getting better. New LED systems adjust light spectra automatically based on plant growth stages. Blue light during seedling phases, red light for flowering. Some systems cut energy use to just 1.64 kilowatt-hours per kilogram of produce.

The combination of LED efficiency and rare varieties creates serious money-making potential. Whether you're growing for health or profit, the future looks bright.

Check out Microgreens World for everything you need to start your operation.

**Source:** Tan, Q. (2025, August 28). AI, LEDs and microgreens: the new age of agriculture. *Tatler Asia*. https://www.tatlerasia.com/power-purpose/innovation/ai-leds-and-microgreens-the-new-age-of-agriculture


**Health Transformation Started This Business Empire**

Jeremy and Jill Keefe didn't set out to build a food empire. They just wanted to feel better.

The Fountain Hills couple started growing microgreens in their kitchen to boost their health. That simple decision transformed their lives—and their community. What began as a windowsill experiment became **Good Living Greens**, now tripling in size with a grand reopening at 16845 E. Avenue of the Fountains.

The results speak volumes. Neighbors started knocking on their door, asking to buy these nutrient-packed greens. The pandemic hit, and demand exploded. People craved fresh, clean food they could trust. The Keefes delivered.

Their expanded 3,000-square-foot store now partners with over 30 local vendors. Extended hours run 7 a.m. to 7 p.m. daily, with grab-and-go breakfast items, weekly vendor showcases, and "Hot Food Wednesdays" featuring ready-to-eat meals.

But here's what matters most: two people changed their health with microgreens, then built a thriving business around that transformation. Their story proves microgreens aren't just another health trend—they're a gateway to better living that people actively seek.

The takeaway hits hard. The Keefes didn't just improve their own wellness. They created a community hub where clean, local food thrives. Their success shows what happens when you prioritize your health: opportunities multiply, neighbors notice, and before you know it, you're serving an entire community.

Your health transformation could start with your next grocery trip.

**Source:** Fountain Hills Times Independent. (2024, October 6). Good living greens announces grand reopening in fountain hills. *NewsBreak*. https://www.newsbreak.com/fountain-hills-times-independent-1805767/4204692984733-good-living-greens-announces-grand-reopening-in-fountain-hills


**Indoor Growing Hides Dangerous Secrets**

Your customers trust you. They buy your microgreens thinking indoor means safer. The Food and Agriculture Organization just shattered that assumption with hard data from outbreak investigations.

Indoor microgreens face the same pathogens as outdoor crops—Salmonella, E. coli, and Listeria. Seeds carry contamination from production fields. Water systems spread bacteria throughout facilities. Growth substrates harbor dangerous microbes for weeks.

One hydroponic facility caused 31 Salmonella cases across four states. The source? Contaminated water from outdoor ponds, despite filtration and UV treatment. Pathogens survived in system sludge and spread through recirculating water.

Commercial growers can't rely on controlled environments alone. Seeds need disinfection protocols—hot water treatments, hydrogen peroxide, or stabilized sodium chlorite. Water requires E. coli testing every batch. Growth substrates demand pathogen screening.

Your reputation depends on prevention, not assumption. Testing costs money. Recalls cost everything. The report documents facilities with inadequate sanitation and contaminated water sources breeding dangerous bacteria.

Smart growers implement multiple safety barriers: seed disinfection, water treatment, substrate testing, and facility sanitation. They document everything. They test regularly. Indoor doesn't mean invincible.

Your business survives on consumer confidence. One outbreak destroys years of trust-building. Don't let your facility become the next case study.

**Source**: Warriner, K., Hasani, M., Warriner, L., Farber, J., & Takeuchi, M. (2025). Modern indoor farming and food safety – A review of hazards, controls and regulatory consideration. Food and Agriculture Organization of the United Nations. https://doi.org/10.4060/cd6554en

# CREATIVE RECIPES

## Ancient Spice Tales

Fenugreek's culinary story starts around 4000 BCE in ancient Mesopotamia.

Archaeological finds at Tell Halal, Iraq, show charred seeds from this era. Egyptians treasured it for cooking and medicine, using it in bread making and even mummification.

Greeks called it "foenum-graecum" meaning "Greek hay". Hippocrates prescribed it as medicine, while Romans flavored their wines with it. Indian Ayurvedic texts dating back 4000 years describe its healing powers.

Today, both seeds and leaves transform dishes worldwide. Seeds smell like maple syrup thanks to sotolone compounds. Indians use whole or powdered seeds in curries, pickles, and spice blends like panch phoron. Fresh leaves make aloo methi curry, while Middle Eastern cooks coat pastirma with ground seeds.

Rich in fiber and minerals, fenugreek helps manage blood sugar and supports breastfeeding mothers. This ancient herb bridges continents and centuries through flavor.

https://microgreensworld.com/microherb-

# Mesopotamian Revival Soup

Turns out, our ancestors in Mesopotamia were onto something incredible. Those charred fenugreek seeds from 4000 BCE? They represent humanity's longest relationship with this maple-scented powerhouse. But here's what fascinated me: what if we could capture that ancient wisdom in a modern bowl?

This soup transforms fenugreek microgreens into the star ingredient, not a pretty afterthought. The microgreens carry 4-40 times more nutrients than mature fenugreek leaves (Xiao et al., 2012), while delivering that distinctive maple aroma from sotolone compounds. *This compound is so potent it can be detected at incredibly low levels - just 0.02 nanograms per liter in air.*

Each spoonful connects you to 6,000 years of culinary history while supporting your blood sugar naturally.

One bowl provides your daily dose of concentrated nutrition. No fluff, just results.

1

### Recipe Information

Prep Time: *15 minutes*
Cook Time: *25 minutes*
Category: *Main Course Soup*
Method: *Stovetop*
Cuisine: *Contemporary Fusion*
Yield: *4 servings*

## 2 Ingredients

*Base*

- 2 tablespoons olive oil
- 1 medium yellow onion, diced
- 3 cloves garlic, minced
- 1 inch fresh ginger, grated
- 4 cups low-sodium vegetable broth
- 1 can (14 oz) coconut milk
- 1 medium sweet potato, cubed small

*Microgreens & Protein::*

- 4 cups fresh fenugreek microgreens (the star!)
- 1 cup cooked lentils (any variety)
- 1/2 cup chopped almonds

*Seasonings:*

- 1 teaspoon turmeric
- 1/2 teaspoon ground cumin
- 1/4 teaspoon black pepper
- 1/2 teaspoon sea salt
- 1 tablespoon lemon juice

## 3 Preparation

1. Heat olive oil in a large soup pot over medium heat.
2. Add diced onion and cook for 5 minutes until translucent.
3. Stir in garlic and ginger, cooking another minute until fragrant.
4. Add sweet potato cubes, turmeric, cumin, and salt.
5. Cook for 3 minutes, stirring frequently to coat vegetables with spices.
6. Pour in vegetable broth and bring to a gentle boil.
7. Reduce heat and simmer 12-15 minutes until sweet potatoes are fork-tender.

## 3 Preparation (continued)

9. Stir in coconut milk and cooked lentils.
10. Simmer another 5 minutes to marry the flavors.
11. **Here's the magic step**: Add fenugreek microgreens to the pot.
12. Stir gently and cook just 2-3 minutes. You want them wilted but still vibrant green. Overcooking destroys their delicate maple notes.
13. Remove from heat.
14. Add lemon juice and chopped almonds.
15. Taste and adjust seasoning.

## 4 Plating

Ladle soup into bowls, making sure each serving gets plenty of those beautiful fenugreek microgreens. The microgreens should be visible throughout, not hiding at the bottom.

Sprinkle additional chopped almonds on top for crunch. A small drizzle of good olive oil adds richness.

Serve immediately with crusty bread or crackers.

## 5 Benefits of Onion Microgreens for Health

Fenugreek microgreens pack serious nutritional power. Research shows they contain concentrated levels of iron, magnesium, and manganese (Xiao et al., 2012). The fiber content helps stabilize blood sugar naturally - perfect for meal prep routines.

Another study indicates fenugreek compounds support healthy insulin response and may aid lactation in nursing mothers (Turkyilmaz et al., 2011). The microgreens deliver these benefits in concentrated form, making each bowl a functional food experience.

The sotolon compounds that give fenugreek its maple aroma also provide antioxidant properties. You're not just eating history - you're nourishing your body with one of humanity's oldest superfoods.

# IN THE NEWS

**Food Safety Plans Are Import for Microgreens Businesses**

Most microgreens operations fall under the small business exemption from federal food safety requirements. Companies with under $1.2 million in annual sales don't need written food safety plans. But here's what caught my attention: 95% of food recalls between 2020 and 2023 happened because of biological, chemical, physical, or allergen hazards that proper planning prevents.

Your microgreens business faces the same contamination risks as larger food manufacturers. Salmonella outbreaks, like the recent cucumber recall affecting 50+ people across multiple states, show how quickly things spiral. The difference? A solid food safety plan turns chaos into controlled response.

Start simple. Document your growing process from seed to harvest. Identify where contamination could happen. Focus on water quality, equipment cleaning, and harvest handling. Most plans need just five preventive controls to work effectively.

Don't wait for problems. Create your recall plan now. Practice tracing products forward to customers and backward to suppliers.

**Source:** Baker, K. A., & Hoover, A. (2025, August/September). Developing a food safety plan for smaller-scale food companies. Food Safety Magazine. https://digitaledition.food-safety.com/august-september-2025/feature-cover-story/


**COMPREHENSIVE FOOD SAFETY FOR MICROGREENS FARMS**

Maximize Safety, Minimize Risks, Safeguard Your Reputation

**GET THE GUIDE!**


Join Microgreens World for a four-week deep-dive into the most common avenues for building and strengthening your microgreens customer base. Unlike most programs, you're watching a bunch of long and boring theoretical videos that leave you more confused than when you started. The goal of the Commercial Microgreens Startup program is to do this together, one step at a time - so you can finally have financial independence!

**REGISTER**

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