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THE HIGHLIGHTS

- Microgreens contain enzyme inhibitors that fight diabetes
- GAP certification unlocks
 wholesale markets for growers
- USDA promotes microgreens on Washington Mall
- Heart disease warning signs start 12 years early

UPCOMING EVENTS

 Next cohort of the Commercial Microgreens Startup course is now open! SIGNUP HERE



 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



WHAT YOU MISSED THIS WEEK

Scientists discovered that microgreens aren't just trendy garnishes—they're biological powerhouses. New research reveals leguminous microgreens like kidney beans contain natural enzyme inhibitors that slow carbohydrate digestion, preventing dangerous blood sugar spikes. Red cabbage microgreens pack six times more vitamin C than mature cabbage, while cilantro microgreens deliver three times more beta-carotene.

Garrett Corwin's journey from spare room trays to supplying 50+ restaurants shows how GAP certification unlocks wholesale success. His Piedmont Microgreens operation proves that building systems, not just grow rooms, separates thriving farms from struggling ones.

Meanwhile, Candice Gasper started Valley Mill Microgreens with just \$10,000 and a backyard, demonstrating microgreens' accessibility for urban farmers. Premium restaurants now pay \$15-25 per pound for specialty varieties.

A major cardiovascular study revealed that people who later developed heart disease started moving less about 12 years before diagnosis. Microgreens offer concentrated protection through vitamins, minerals, and antioxidants that support blood pressure and cholesterol control.

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NUTRITION SCIENCE

Microgreens: Your Tiny Guardians Against Disease

Every bite you skip of these nutrient-packed seedlings means missing out on compounds that could fundamentally change your metabolic health. New research reveals that microgreens aren't just trendy garnishes—they're biological powerhouses containing specific enzymes and inhibitors that actively fight diabetes, obesity, and digestive disorders.

The Enzyme Defense System You're Not Using

Scientists discovered that leguminous microgreens like kidney beans contain natural alpha-amylase and alpha-glucosidase inhibitors. These compounds work differently than synthetic drugs like Acarbose, which causes bloating and digestive distress. When you eat microgreens, these inhibitors slow down carbohydrate digestion, preventing dangerous blood sugar spikes that damage your arteries and organs over time.

Here's what happens: normally, your digestive enzymes break down complex carbohydrates into simple sugars that flood your bloodstream. Microgreen inhibitors act like biological brakes, slowing this process. The result? More stable blood sugar levels and reduced risk of Type 2 diabetes. With diabetes projected to affect 57 million Indians by 2025, this isn't just interesting science—it's survival information.

Your Gut's New Best Friends

Microgreens contain myrosinase, an enzyme that transforms glucosinolates into isothiocyanates when you chew cruciferous varieties like broccoli, cabbage, and mustard microgreens. These isothiocyanates don't just fight cancer—they actively reshape your gut microbiome. Research shows they reduce inflammation in conditions like ulcerative colitis and irritable bowel syndrome by providing protein inhibitors that calm digestive enzyme activity.

The gut connection runs deeper. When protein digestion slows from these natural inhibitors, undigested proteins reach your colon where beneficial bacteria ferment them into short-chain fatty acids. These compounds strengthen your intestinal barrier and reduce systemic inflammation. You're literally feeding the good bacteria while starving the harmful ones.



Nutritional Concentration That Defies Logic

The vitamin densities in microgreens challenge everything we know about plant nutrition. Red cabbage microgreens contain six times more vitamin C than mature red cabbage. Cilantro microgreens pack three times more beta-carotene than full-grown cilantro. Garnet amaranth microgreens deliver 4.1 µg/g of vitamin K compared to just 1.14 µg/g in mature amaranth.

These aren't minor improvements—they're nutritional quantum leaps. Green daikon radish microgreens contain 87.4 mg/100g of alpha-tocopherol (vitamin E), while cilantro microgreens provide 10.1 mg/100g of lutein and zeaxanthin, the only carotenoids found in your retina. Missing these concentrated nutrients means accepting preventable vision loss and cellular damage.

The Weight Loss Mechanism You Haven't Tried

Obesity stems from energy imbalance, but microgreens offer a third pathway beyond diet and exercise. The enzyme inhibitors in leguminous microgreens reduce carbohydrate absorption in your small intestine. Less absorption means fewer calories entering your system, even when eating the same foods.

The protein inhibitors also slow gastric emptying and increase satiety signals. Your stomach stays fuller longer, naturally reducing food intake without willpower battles.

This isn't speculation—it's documented enzymatic action that pharmaceutical companies try to replicate with synthetic compounds.

Action Steps

Kidney bean, broccoli, and red cabbage microgreens contain powerful enzyme inhibitors that block carb and fat absorption. Harvest at 7-14 days, eat raw to preserve benefits. Perfect for diabetics, weight management, and adding to pasta or grain dishes.

While these findings are promising, clinical trials remain the gold standard for establishing therapeutic doses and long-term effects. However, the existing evidence strongly suggests that incorporating enzyme-rich microgreens into your daily routine could provide significant metabolic protection.

The question isn't whether you can afford to eat microgreens—it's whether you can afford not to.

Sources: Kapoor, J., & Krupa, S. (2024). A review on microgreens their enzymes, and inhibitor's role on health. Journal of Innovations in Pharmaceutical and Biological Sciences, 11(4), 14-21. https://doi.org/10.56511/JIPBS.2024.11402

FUN FACTS

Cholesterol-Cutting Greens

Red cabbage microgreens lowered LDL cholesterol more effectively than mature cabbage in mouse studies. They also reduced weight gain and delivered more antioxidants, suggesting microgreens may influence heart health beyond standard vegetable consumption.

Sun-Sensitive Shoots

Buckwheat microgreens contain fagopyrin, a compound that can cause unusual skin sensitivity to sunlight. Overconsumption may trigger rashes or burning, though normal culinary use remains safe. Moderation prevents this quirky phototoxic reaction.

Sweet Corn Shoots

Popcorn microgreens, grown in darkness, stay pale yellow and accumulate sugars instead of chlorophyll. Their flavor is unexpectedly candy-like, delighting chefs who use them to surprise diners in gourmet salads, appetizers, and creative cocktails.

WELCOME NEW MEMBERS

| NAME | CITY | COUNTRY |
|-------------------|------------------|--------------|
| Ivelina Eftimova | Athens | Greece |
| Asif Muhammed | Kollam | India |
| Komal Kadam | Pune | India |
| Colleen Donaldson | Johannesburg | South Africa |
| Christopher H | Ashburn | USA |
| Susan Ruzzo | Boston | USA |
| Bonita Wade | Everett | USA |
| Philip Somerlot | North Manchester | USA |
| Brian Mathers | Topeka | USA |
| Sandip | Atlanta | USA |
| Jyotika Vazirani | New York | USA |
| Khana Wara | | |
| Tami Saanson | | |
| Tracy Memery | | |
| Cristian Fazendas | | |
| Francis Ndegwa | | |



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COMMUNITY CORNER



Why GAP Certification Unlocks Wholesale Success

Garrett Corwin built <u>Piedmont Microgreens</u> from spare room trays to supplying 50+ restaurants. His journey reveals what small commercial growers need to break into wholesale markets.

Scaling doesn't require viral marketing or secret growth hacks. Corwin used the same strategy that landed his first customer: cold calling. He picked up the phone, introduced himself, dropped off samples, and followed up consistently. Every new restaurant came from this process: identify leads, make calls, deliver samples, follow up.

What changed over time wasn't strategy but execution quality. His team tightened their pitch, improved customer relationship management systems, and learned to anticipate chef needs. They built trust one delivery at a time. Success came down to showing up, solving problems quickly, and maintaining quality.

The breakthrough came through GAP certification. Good Agricultural Practices certification opens doors to major wholesalers that small farms can't access. Years before getting certified, Corwin met wholesaler representatives who said: "We want to buy from you, but we can't until you're GAP certified."

GAP certification requires commercial wash/pack areas, controlled access, and food safety programs. Piedmont Microgreens operated from a modest space without proper infrastructure. The wholesaler couldn't bend requirements.

Corwin kept showing up at events and networking meetups. Every interaction included updates and reaffirmed his commitment. Years later, when he found the right commercial space and passed his audit, that wholesaler became his first call. They remembered him. This time, he could say yes. That door took years of persistence and infrastructure growth. Scaling means growing into the business that's ready when customers say yes.

Small growers avoid certification because it's difficult and expensive. Corwin embraced it early and earned Harmonized GAP certification. This separated his operation from small farms that can't access wholesale markets. Lean manufacturing principles transformed operations. Microgreen farming resembles production lines with seeds, trays, and harvest bins. Corwin built micro-systems across the farm using simple tools.

New employees scan QR codes to identify crops at different growth stages. Visual boards show packaging sizes and which crops go in specific containers. These systems reduce mistakes, cut training time, and create independence.

Weekly improvement sessions ask: "What annoys you about this job?" Small frustrations get fixed immediately. They ziptied power strips above tables and added colored tape to equipment. These fixes remove friction and give workers control.

Customer acquisition happens through relationship building, not transactions. Some partnerships develop over years of consistent contact. The key is staying visible and maintaining relationships when immediate business isn't possible. Corwin acquired a competitor's customer list when Carolina Microgreens shut down. He offered a nominal amount covering closure costs for warm customer introductions. This strategic acquisition increased market share without buying equipment.

The business serves restaurants seeking garnish and flavor, wellness practitioners valuing nutrient density, and retailers wanting dependable sources. What sets successful operations apart is building systems, not grow rooms. Dependability and scalability separate thriving farms from struggling ones.

Food safety standards aren't optional for wholesale success. Major buyers require GAP certification, controlled environments, and documented procedures. Small growers who invest early gain competitive advantages.

Corwin, G. (2024). Meet Garrett Corwin. Canvas Rebel. https://canvasrebel.com/meet-garrett-corwin/



USDA Promotes Microgreens on the Washinton Mall

Candice Gasper started <u>Valley Mill Microgreens</u> with just \$10,000 and a backyard. Her journey from environmental scientist to urban farmer reveals something powerful about microgreens.

Small growers face land access problems and rising costs. Microgreens solve both. You can start production in your basement, garage, or spare room. No expensive farmland required. Gasper proves you can build a viable business growing indoors year-round.

The profit margins surprise most people. Premium restaurants pay \$15-25 per pound for fresh microgreens. Compare that to lettuce at \$2-3 per pound. Smart growers focus on specialty varieties like purple radish or spicy mustard. Chefs love unique flavors they can't get from traditional suppliers.

Growing microgreens teaches patience and problem-solving. About 50% of your first crops will fail. That's normal. Each failure teaches valuable lessons about moisture, temperature, and timing. Successful growers embrace this learning curve instead of fighting it.

Health-conscious consumers drive demand higher each year. People want nutrient-dense food without pesticides or long transport times. Microgreens deliver both. They contain concentrated vitamins A, C, E, and K plus folate, iron, and potassium. Customers get more nutrition in smaller portions.

The business model works for part-time growers too. Start small at local farmers markets. Build relationships with nearby restaurants. Many successful growers begin as weekend side hustles before scaling up. Low startup costs make testing the market risk-free.

Urban farming connects people to their food in ways traditional agriculture can't. When customers meet their grower face-to-face, they understand quality differences. Fresh microgreens harvested that morning taste completely different from week-old grocery store greens.

Carbon footprint matters more to consumers now. Local microgreens eliminate transport emissions while providing superior nutrition. Customer base includes environmentally conscious eaters willing to pay premium prices.

Equipment needs stay simple. Shallow trays, growing medium, seeds, and basic lighting handle most varieties. You don't need complex hydroponic systems. Many growers use repurposed materials to keep costs low while testing varieties.

Quality control becomes easier with shorter growing cycles. You spot problems quickly and adjust techniques for the next batch. Traditional farming requires waiting months to test improvements. Microgreens let you experiment weekly.

The foraging movement influences consumer preferences toward diverse flavors. Microgreens satisfy this craving with varieties like amaranth, beet tops, and herb mixes that provide complex tastes impossible to find in regular vegetables.

Food justice connects to microgreens accessibility. People in food deserts can grow fresh nutrition indoors regardless of conditions or soil quality. SNAP allows using benefits for seeds, stretching food dollars while improving nutrition.

Start eating microgreens today. Add them to sandwiches, salads, and smoothies. If you're considering commercial growing, test market demand at your local farmers market first

The combination of nutrition, consumer demand, and low startup costs makes microgreens the smartest entry into urban farming.

Source: Gasper, C. (Host). (2024). Candice Gasper on urban farming. In Problem Busters Podcast. https://problembusterspodcast.com/candice-gasper-on-urban-farming/

CREATIVE RECIPES



Ancient Kitchen Treasure

Lemon balm's culinary journey began over 2,000 years ago when Greeks called it "honey leaf."

Ancient physicians like Dioscorides documented its uses, while Romans planted it near beehives. By the 7th century,

Moors brought it to Spain, spreading throughout Europe by medieval times.

Charlemagne ordered monasteries to grow lemon balm in the 9th century. The famous Carmelite Water—an alcoholic extract created by nuns in the 14th century—became Europe's first commercial herbal liqueur. Tudor households scattered leaves on floors for fragrance.

Colonial Americans brought seeds to the New World, using the herb in jams, jellies, and teas as a lemon substitute. Thomas Jefferson grew it at Monticello.

Today, it flavors Swiss cheeses and European liqueurs like Chartreuse, while Asian cuisines add it to curries and soups.



Mediterranean Lemon Balm Microgreens Bowl with Herb-Crusted Chickpea

This vibrant Mediterranean bowl transforms humble lemon balm microgreens into the star of your plate, honoring centuries of culinary wisdom.

Just as ancient Greeks treasured this "honey leaf" and medieval monasteries cultivated it for both nourishment and healing, we celebrate its fresh, lemony essence in a modern power bowl.

The microgreens aren't just scattered on top—they're woven throughout every component, creating layers of bright, citrusy flavor that dance with protein-rich chickpea patties and creamy tahini.

Think of it as Charlemagne's monastery garden meeting your meal prep goals.



Recipe Information

Prep Time: 25 min

Cook Time: 15 minutes

Category: Main Course

Method: Pan-frying and Assembly Cuisine: Mediterranean-inspired

Yield: 4 servings





Ingredients

For the Lemon Balm Chickpea Patties:

- · 2 cups cooked chickpeas, drained and rinsed
- · 11/2 cups fresh lemon balm microgreens, divided
- · 2 tablespoons tahini
- · 1 clove garlic, minced
- · 1 tablespoon lemon juice
- · ½ teaspoon cumin
- · 1/4 teaspoon sea salt
- · 2 tablespoons olive oil for cooking

For the Lemon Balm Tahini Sauce:

- · ⅓ cup tahini
- · ½ cup fresh lemon balm microgreens
- · 3 tablespoons lemon juice
- · 2 tablespoons warm water
- · 1 small garlic clove
- · Pinch of salt

For the Bowl Assembly:

- · 1 cup fresh lemon balm microgreens
- · 2 cups cooked quinoa or farro
- · 1 cucumber, diced
- · 1 cup cherry tomatoes, halved
- · 1/4 red onion, thinly sliced
- · 1/4 cup pumpkin seeds
- · $\frac{1}{2}$ teaspoon fresh turmeric root, grated



Preparation

Make the Lemon Balm Tahini Sauce

- Blend tahini, ½ cup lemon balm microgreens, lemon juice, warm water, garlic, and salt in a food processor until smooth and bright green.
- 2. Set aside.

Prepare the Chickpea Patties

- In a large bowl, mash chickpeas until mostly smooth but still chunky.
- Mix in 1 cup lemon balm microgreens, tahini, garlic, lemon juice, cumin, and salt. The mixture should hold together when pressed.



Preparation

(continued)

- Form into 8 small patties using your hands.
- Heat olive oil in a large skillet over medium heat.
- Cook patties 3-4 minutes per side until golden and crispy outside.

Assemble the Bowl

- 10. Divide quinoa between four bowls.
- Top each with 2 warm chickpea patties.
- Arrange cucumber, tomatoes, and red onion around the patties.
- Generously scatter remaining ½ cup fresh lemon balm microgreens over everything.
- Drizzle with lemon balm tahini sauce and sprinkle with pumpkin seeds.



Plating

Create visual layers by placing the warm patties slightly off-center, allowing the vibrant green microgreens to cascade around them like a fresh garden bed.

The lemon balm microgreens should appear abundant and purposeful, not sparse.

Drizzle the green-tinted tahini sauce in artistic swooshes, and finish with a final handful of microgreens on top for height and freshness.



Benefits of Lemon Balm Microgreens for Health

Lemon balm microgreens pack concentrated nutrients in their tender leaves. These young shoots contain higher levels of antioxidants than their mature counterparts, supporting cellular health and immune function.

Rich in rosmarinic acid, they may help reduce inflammation naturally. The concentrated essential oils provide natural calming compounds that have been cherished since ancient times.

Their high vitamin C content supports collagen production, while folate aids in energy metabolism. Lemon balm microgreen's naturally sweet, citrusy flavor makes eating your daily dose of concentrated nutrition a pure pleasure.

IN THE NEWS

Your Heart Starts Failing Years Earlier

Did you know your heart might be sending warning signals over a decade before you feel anything wrong? A major study tracking over 3,000 adults for 35 years found something pretty startling. People who later developed heart disease started moving less about 12 years before their diagnosis. Their physical activity dropped steadily, then crashed hard in the two years before their heart problems showed up.

The research, published in JAMA Cardiology, revealed that Black women faced the biggest challenges while men of all backgrounds saw steady declines from young adulthood through middle age.

But here's what gets exciting for us microgreens lovers. Your tiny greens pack serious cardiovascular protection. Those concentrated vitamins, minerals, and antioxidants directly support the exact risk factors researchers mentioned: blood pressure, cholesterol, and blood sugar control.

Start adding a handful of microgreens to your meals today. Your future heart will thank you.

Source: Sheehan, K. (2025, August 17). Cardiovascular disease linked to less exercise 12 years before onset. Medical News Today. https://www.medicalnewstoday.com/articles/lower-physical-activity-12-years-before-onset-may-indicate-heart-disease-risk





Join Microgreens World for a four-week deep-dive into the most common avenues building for 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!

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