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THE HIGHLIGHT

- Radish microgreens show surprising anti-cancer cell effects
- Restaurant-grown beats storebought for freshness and nutrition
- Former banker's simple method goes viral nationwide
- Local farms triumph over shaky global supply chains

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

Turkish researchers dropped some serious science this week. Red radish microgreens packed 2-3 times more protective compounds than parsley varieties, but here's the twist - parsley actually worked better against cancer cells in lab tests. Sometimes higher antioxidants don't tell the whole story.

Meanwhile, real people are proving microgreens work in the real world. SpaceFarms grows fresh greens right inside restaurant dining rooms in Georgia, delivering same-day harvests that blow away anything trucked in from thousands of miles away.

Former banker Jacqueline Jackson walked away from her corporate job to grow tiny plants in Alabama. Her secret? Skip the kitchen heat fluctuations and find a spot that stays 60-70 degrees consistently. Seven years later, she's teaching everyone why this decision changed everything.

Small farms keep winning while global supply chains shake. When storms hit Louisiana growers, they fixed drainage and kept going. Local beats distant every time – better nutrition, better taste, zero transport chaos.

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NUTRITION SCIENCE

Radish and Parsley Microgreens: Some Surprising Findings

Ever wondered if those tiny green shoots on your salad could actually fight cancer? Researchers just discovered something pretty amazing about microgreens – specifically radish and parsley varieties.

Scientists in Turkey decided to put microgreens to the test against chronic lymphocytic leukaemia, a type of blood cancer. What they found might change how we think about these little powerhouses.

Here's the scoop: red radish microgreens absolutely crushed it in the antioxidant department. We're talking about compounds that fight off the bad stuff in your body

- the free radicals that can cause all sorts of health problems.

The radish microgreens had about 2-3 times more protective polyphenols than parsley microgreens. Think of polyphenols as your body's personal security team.

The numbers tell quite a story. Red radish microgreens packed 4,133 mg/g of total polyphenols compared to parsley's 1,851 mg/g. For flavonoids – another type of protective compound – radish delivered 2,562 mg/g while parsley managed 1,306 mg/g.

Both varieties showed impressive DPPH radical scavenging activity, with radish slightly edging out parsley at 701,423 $\mu g/g$ versus 625,717 $\mu g/g$.

But here's where it gets really interesting. When researchers tested these microgreens against actual cancer cells in the lab, something unexpected happened.

The parsley microgreens worked like a charm, stopping cancer cell growth at specific doses. For one type of cancer cell (MEC-1), it took about 70 mg/ml to cut growth in half. For another type (HG-3), it needed 75 mg/ml.

Now, the radish microgreens? They threw everyone a curveball. While they worked great against one cancer cell line (MEC-1), they actually seemed to encourage growth in the other type (HG-3).

Scientists think this might be because different cancer cells respond differently to various compounds.

It's like having a key that opens one lock perfectly but jams another.

What makes this research particularly fascinating is how it challenges our assumptions. You'd expect the microgreen with higher antioxidant content to perform better across the board, right? Not necessarily.

The researchers discovered that p-53 mutation status in cancer cells might explain these different responses.

Cells with mutations behaved differently than wild-type cells.

The protein story adds another layer. Parsley microgreens had twice the protein of radish varieties (2.75% versus 1.25%), but radish microgreens won the mineral contest with higher ash content.

Both had moisture levels around 90-92%, which makes sense since they're so young and tender.

What does this mean for you? Well, don't toss your radish microgreens just yet.

The researchers found that these tiny greens pack 20 times more antioxidant power than their full-grown counterparts. That's like getting a nutritional upgrade without changing your plate size.

The takeaway? Microgreens aren't just fancy garnish anymore. They're legitimate functional foods with real health potential. The fact that these tiny plants can influence cancer cell behavior in a petri dish suggests they might offer protective benefits when part of a balanced diet.

Source: Tıraş, S., Kartal, Y. K., Ünal, D. Ö., Ercan, N., & Sel, T. (2025). Antioxidant content analysis of microgreen radish and parsley and evaluation of their antiproliferative effects in chronic lymphocytic leukemia cells. Turkish Journal of Agriculture - Food Science and Technology, 13(6), 1435-1442. https://doi.org/10.24925/turjaf.v13i6.1435-1442.7506

PLEASE NOTE: While these studies present promising preliminary data on the nutritional and functional properties of microgreens, they do not yet meet the rigorous standards required for commercial practice. This is primarily due to the inherent variability of biological materials and the unspecified or single-source nature of the microgreen samples used. Substantial additional research, including controlled cultivation studies and validation across multiple batches, is necessary before these scientific findings can confidently inform commercial investment decisions or product claims.

FUN FACTS

Signals: Chemical Waves

Microgreens use chemical waves to talk between cells across long distances. When one cell gets stressed, it sends signals through oxygen molecules to warn other cells. This creates a network where the whole plant can respond together to threats or changes in its environment.

Far-Red Light Triggers Stress

Adding far-red light makes microgreens think they're in shade, which tricks them into growing bigger. This stress response can boost their total size by up to forty percent. The plants get taller and wider as they try to reach for more light in their fake shade.

Broccoli Radish Mix Boosts Sulforaphane

Mix radish or rocket microgreens with broccoli ones to double the healthy compounds. The different plants have special enzymes that work together to make more of the good stuff called sulforaphane. Rocket works best, boosting the health benefits by over two times normal levels.

WELCOME NEW MEMBERS

NAME		
Vishal Bandgar	Dhaka	Bangladesh
James kernewekrath	Plymouth	England
Ramchandra Patil	Chennai	India
Gajanan Thombare	Delhi	India
Rajveer Tarekar	Kolkata	India
Ram Karad	Mumbai	India
Swapnaja Mnajamehta	Mumbai	India
Hari Daggumati	Jakarta	Indonesia
Sharon Richards	Amsterdam	Netherlands
Emma Olofsdotter	Gothenburg	Sweden
Catherine Heimann	Zurich	Switzerland
Victor John	Ashburn	United States
Keith Gill	Los Angeles	United States
Thomas Short		United States
Lisa Berry		United States
Sandra Katiana		United States



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COMMUNITY CORNER



SpaceFarms Shows Why Restaurant-Grown Microgreens

Beat Store-Bought

Picture walking into a restaurant where your salad was harvested just hours before you arrived. That's exactly what happens at Stamba Hotel in Tbilisi, Georgia, where SpaceFarms grows microgreens right inside the dining room.

Tusya Garibashvili started this operation after admitting she didn't even know what microgreens were back in 2018. Now she's proving something important: fresh beats everything. Her vertical farm delivers herbs, microgreens, and leafy greens the same day chefs order them. No sitting in trucks for days. No wilted leaves.

The numbers tell the story. Six growing racks produce 450 kilograms monthly using 75% less water than traditional farming. Zero transport emissions. No chemicals whatsoever.

Here's where it gets interesting for you. SpaceFarms created "Spots" - compact 2-square-meter units that produce 10-15 kg of greens monthly. They've installed these systems in 11 restaurants around Tbilisi, with plans for international expansion.

Why does this matter? You're seeing the future of how fresh food reaches your plate. Whether you grow at home, sell to restaurants, or simply want the healthiest microgreens possible, this model proves that location matters more than you think.

Source: Vertical Farm Daily. (2024). Modular vertical farms for restaurants and private clients in Tbilisi and beyond. Vertical Farm Daily. https://www.verticalfarmdaily.com/article/9748275/modular-vertical-farms-for-restaurants-and-private-clients-in-tbilisi-and-beyond/.



Former Banker's Microgreens Secret Goes Viral

Jacqueline Jackson walked away from banking to grow tiny plants. Seven years later, she's teaching everyone why this decision changed her life completely.

Jackson operates Mattie's Garden in Birmingham, Alabama, where she grows microgreens that pack serious nutritional punch. These aren't fancy restaurant garnishes anymore. She's bringing them directly to everyday people at farmers markets, proving you don't need a \$50 steak to eat like a chef.

Her method works because it's simple. Fill containers with soil, spread seeds, mist daily, then harvest in 10-15 days when plants reach 3-4 inches tall. The secret lies in temperature control. Skip the kitchen where heat fluctuates. Find a spot that stays between 60-70 degrees consistently.

Jackson grows sunflower, radish, and kale varieties that deliver concentrated nutrition in small packages. You're essentially eating baby plants at their nutritional peak. Cut them 1-1.5 inches above soil with clean scissors, store unwashed in sealed containers, then rinse before eating.

Think about this: most people spend years trying different diets. Jackson found something that delivers maximum nutrition in minimum time. Your body deserves fresh, living food that hasn't traveled thousands of miles to reach your plate.

Source: Dorsey, S. (2025, July 9). This indoor gardening project is ready to harvest in 2 weeks. Southern Living. https://www.southernliving.com/how-to-grow-microgreens-11765865

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Local Farms Beat Global Supply Chaos

Small farms are winning where big agriculture fails. When storms washed away Trey Johnson's seedlings in Louisiana, he didn't give up. He fixed his drainage and kept going. That's the spirit driving small farmers across America right now.

Here's what matters for you: Karen Kurzwegs at Acadiana Roots proves microgreens can thrive when other crops struggle. She switched from selling directly to customers and started supplying restaurants instead. Smart move. Restaurants want consistent, fresh greens they can count on.

Global supply chains are shaking. Import costs keep jumping up and down. That's pushing more people toward local farmers markets for their produce.

The numbers back this up. Small-scale operations use 90% less water than traditional farming. They grow faster. They waste less. Most importantly, they stay close to you.

Your microgreens don't need to travel thousands of miles to reach your plate. Local growers can harvest Tuesday and have fresh microgreens in your hands Wednesday. That means better nutrition, better taste, and better value for your health investment.

Source: Boudreaux, A. (2025, January 11). Small-scale farms provide a local alternative to a shaky global market. The Current LA. https://thecurrentla.com/2025/small-scale-farms-provide-a-local-alternative-to-a-shaky-global-market/.

Mom Transforms Daughter's Bedroom Into Gold

Rebecca Moreno-Adam and her daughter Emily started something powerful in Mandan, North Dakota.

What began as a simple wooden rack with small trays has grown into <u>Legendary Greens</u>, a business that's changing how families think about nutrition.

Emily runs the operation from seed to harvest, handling planting, cleaning, and cutting. They converted her bedroom into a growing space after she moved out.

The process works because they follow a proven method: three days of blackout growing, followed by careful harvesting at peak nutrition.

Their success at Mandan farmers market proves people want fresh, local nutrition. Rebecca credits her husband for seeing the business potential when she was still treating it as a hobby.

Here's what matters for your health: you already eat vegetables, but these deliver exponentially more nutritional value per bite. Your body processes concentrated nutrients more efficiently than diluted ones from mature plants.

Source: SB Technical University of Ostrava. (2024). Smart technology helps grow microgreens. VSB-TUO Alumni News. https://alumni.vsb.cz/en/news-detail/?reportId=49191



CREATIVE RECIPES



Spinach Myth

Radish and parsley share fascinating ancient roots that stretch back thousands of years.

Radishes fed Egyptian pyramid builders around 2700 BCE, while Greeks valued them so highly they created golden replicas as offerings to Apollo.

Parsley started darker – ancient Greeks used it exclusively for funeral ceremonies, believing it sprouted from a hero's blood.

Everything changed in medieval times. Charlemagne mandated parsley cultivation across his empire around 800 AD, transforming it from death symbol to kitchen staple. Meanwhile, medieval Europeans grew radishes weighing 100 pounds.

Both vegetables traveled globally through colonization. Spanish colonizers brought radishes to Mexico by 1500, creating today's Night of the Radishes festival. From pyramid provisions to modern festivals, these humble vegetables carry remarkable stories of human civilization, cultural exchange, and surprising historical significance across four millennia.



Pyramid Builder's Power Bowl: Ancient Grains with Radish & Parsley Microgreen Chimichurri

This vibrant bowl celebrates the incredible journey of radishes and parsley from ancient civilizations to modern kitchens.

Just imagine – those same radishes that fueled Egyptian pyramid builders around 2700 BCE now grace our tables as delicate, peppery microgreens bursting with concentrated nutrition. And parsley? It went from being sacred funeral herbs for the Greeks to Charlemagne's mandated empire staple by 800 AD.

What makes this dish special isn't just the history. These microgreens aren't playing second fiddle as garnish – they're the star performers in a bold chimichurri that transforms simple grains into something extraordinary.

The radish microgreens bring that signature bite that once satisfied hardworking pyramid laborers, while parsley microgreens deliver the fresh, mineral notes that medieval cooks prized.



Recipe Information

Prep Time: 25 minutes

Cook Time: 30 minutes

Category: Main Course Bowl

Method: Simmering, Blending

Cuisine: Mediterranean-inspired

Yield: 4 servings



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Ingredients

For the Ancient Grain Base:

- · 1 cup quinoa
- ½ cup wild rice
- · 3 cups vegetable broth
- · 1 bay leaf
- · ½ teaspoon sea salt

For the Radish & Parsley Microgreen Chimichurri:

- · 2 cups fresh parsley microgreens (packed)
- · 1 cup fresh radish microgreens
- · 3 cloves garlic, minced
- ½ cup red wine vinegar
- · ½ cup extra virgin olive oil
- · 1 teaspoon red pepper flakes
- · ½ teaspoon kosher salt
- · 1/4 teaspoon black pepper

For the Bowl Assembly

- · 1 cup cherry tomatoes, halved
- · 1 cucumber, diced
- · ½ red onion, thinly sliced
- · 4 oz goat cheese, crumbled
- · 1/4 cup toasted pine nuts
- · Additional microgreens for garnish

3

Preparation

- Start with your grains they're the foundation that'll carry all those bright flavors.
- Rinse quinoa until water runs clear (trust me, skip this and you'll taste bitter notes).
- 3. Combine quinoa, wild rice, broth, bay leaf, and salt in a medium saucepan.
- 4. Bring to a boil, then reduce heat to low.
- Cover and simmer 25-30 minutes until grains are tender and liquid absorbed.
- While grains cook, make your chimichurri. This isn't your typical herb paste - we're building layers of flavor that honor these ancient ingredients.



Preparation

(continued)

- In a food processor, pulse garlic until minced.
- Add both microgreens and pulse briefly - you want texture, not puree.
- 13. Here's where it gets interesting. Slowly drizzle in olive oil while pulsing. The microgreens should be chopped but still recognizable.
- Stir in vinegar, red pepper flakes, salt, and pepper by hand.
- Taste and adjust the radish microgreens should provide a gentle heat that builds slowly.
- Let chimichurri sit at room temperature while you prep vegetables. Those flavors need time to mingle and develop.



Plating

Fluff grains with a fork and divide among four bowls. Here's where presentation matters – don't just dump everything together. Create sections around the bowl: tomatoes in one area, cucumber in another, red onion scattered throughout.

Spoon generous amounts of that vibrant green chimichurri right over the grains. Don't be shy – this sauce is your flavor powerhouse. Crumble goat cheese on top, sprinkle with pine nuts, and finish with fresh microgreens.

The result? Each bite delivers different textures and flavors that somehow work together perfectly.

Check out Alice Waters' cookbooks and her Chez Panisse Foundation resources for farm-to-table cooking that celebrates simple, quality ingredients.

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Benefits of Radish and Parsley Microgreens for Health

These tiny powerhouses pack serious nutritional punch. Radish microgreens contain 40 times more vitamin E than mature radishes, plus they're loaded with vitamins A, B, C, and K. They support liver detoxification and provide natural compounds that help your body fight inflammation.

Parsley microgreens? They're vitamin C champions – more concentrated than oranges. They also deliver folate, iron, and flavonoids that support heart health. Traditional medicine has used parsley for kidney function and digestive health for centuries, and these concentrated microgreens amplify those benefits.

Together, they create a nutritional symphony that would make those ancient pyramid builders

IN THE NEWS

Why Microgreens Are Safer Than Supplements

Think herbal supplements are natural and pure? Research shows 42% of popular herbal products tested contained adulterants, toxins, or wrong plant species. Meanwhile, you're growing microgreens at home with complete control over every seed, soil, and harvest moment. You see exactly what goes into your body. No mystery fillers. No heavy metals from contaminated soil. No synthetic compounds masquerading as nature's medicine. Your windowsill microgreens deliver authentic nutrition you can trust - something most supplement buyers never experience.

Source: Johnson, R. B. (2024). From nature to nutraceutical: Look out for adulteration in herbal supplements. Council for Advancement of Science and Innovation. https://www.casi.org/from-nature-to-nutraceutical-look-out-for-adulteration-in-herbal-supplements





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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