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THE HIGHLIGHTS

- Microgreens fight harmful bacteria in your gut
- Major indoor farming merger creates \$200M powerhouse
- Flash-cooking onion microgreens unlocks concentrated nutrition
- School kids grow better food through hands-on farming

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

Czech researchers proved microgreens pack serious antibacterial power against dangerous bacteria like E. coli and Staphylococcus aureus. Radish and onion varieties showed the strongest defense against food poisoning bacteria, making your gut health bulletproof.

Two indoor farming giants, 80 Acres Farms and Soli Organic, merged into a \$200 million powerhouse serving 17,000 retail locations. Microgreens will soon be accessible at your local supermarket, not just fancy stores.

A basement grower in Bloomington-Normal sells thousands of microgreens at farmers markets using simple LED setups. His 8-12 day growing cycle proves small spaces can generate big nutrition.

Delhi mother Pragati Chaswal transformed 7,000 school children into food advocates through hands-on microgreen farming. Students now grow their own food and ditch plastic packaging.

Fresh research on lithium deficiency links brain mineral levels to early Alzheimer's disease, opening new treatment possibilities beyond current plaqueclearing drugs.

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NUTRITION SCIENCE

Microgreens: Your Gut's Secret Weapon Against Harmful Bacteria

Last week, my neighbor Raiko called me after school. We were talking about the Walmart shrimp recall, and she was worried about food safety in general. "Andrew," she said, "between radioactive shrimp and all these bacteria scares, I don't know what's safe anymore." I told her about something that might surprise her: the tiny microgreens in her fridge could be her best defense against harmful bacteria.

New research from Mendel University in Brno, Czech Republic proves that microgreens pack serious antibacterial power against the exact bacteria that make us sick. Scientists tested six common microgreens against five dangerous bacteria. The results? These little plants fight back hard.

Here's what these bacteria do to your body

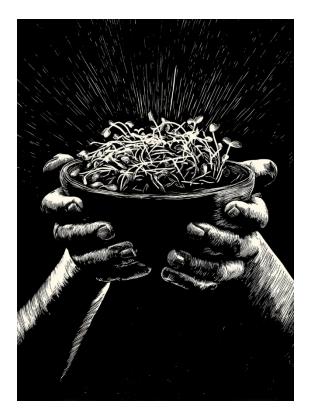
E. coli gives you severe diarrhea, stomach cramps, and vomiting. Staphylococcus aureus causes food poisoning with nausea and stomach pain. Bacillus cereus triggers violent stomach cramps. Pseudomonas aeruginosa attacks your respiratory system. Enterococcus faecalis leads to urinary tract infections and gut problems.

Now here's the good news. The study found that radish and onion microgreens were champions at stopping Staphylococcus aureus, the bacteria responsible for some of the worst food poisoning cases. These tiny plants created zones where the bacteria couldn't survive. Think of it like having microscopic bodyguards in your salad bowl.

Chives and *onion* microgreens showed power against Bacillus cereus, the bacteria that causes stomach cramps. Watercress microgreens fought multiple bacteria types, proving that variety matters when you're building your defense system.

The researchers found that E. coli was the toughest opponent, showing resistance to most microgreens. But even the strongest bacteria couldn't completely ignore the antibacterial compounds in these plants. Your gut gets help with every bite.

What makes these microgreens so powerful? They're loaded with polyphenols, flavonoids, and organic acids.



They're your body's cleanup crew. When harmful bacteria try to set up shop in your digestive system, these compounds kick them out.

The beauty of this research is that it tested microgreens at eating stage, not some concentrated lab extract. The plants you buy at the store or grow on your windowsill have the same bacteria-fighting power the scientists measured.

Your intestinal health depends on keeping bad bacteria in check while supporting good bacteria. Most people think about probiotics, but they're missing half the equation. Microgreens work like probiotics' tough older sibling, clearing out troublemakers so the good guys can thrive.

Poor gut health links to everything from mood problems to weakened immunity. When your digestive system fights off harmful bacteria naturally, your whole body feels the difference. Better digestion, clearer thinking, stronger immune response.

The study tested six varieties, but you don't need all six to get results. Start with radish microgreens for their proven power against food poisoning bacteria. Add onion microgreens for their broad-spectrum antibacterial effects. Toss in some watercress for extra protection.

Fresh microgreens work best. The antibacterial compounds start breaking down after harvest, so eat them within a few days.

Store them properly in the fridge, rinse gently before eating, and add them to meals raw to preserve their bacteria-fighting power.

Your gut health affects your energy, mood, and overall wellness more than any other single factor. While everyone else worries about the next stomach bug or food safety scare, you can take action. These microgreens give your digestive system the ammunition it needs to fight back.

Raiko started adding microgreens to her meals three times a week. No more food safety scares. No more constant worry about the next bacterial problem.

Just peace of mind that comes from knowing her gut health has serious backup.

The science is clear: microgreens aren't just food. They're medicine growing in plain sight. Your digestive system deserves this kind of protection. Your family's health depends on it. Don't wait for the next bacterial outbreak to realize what you're missing.

Sources: Franke, G., Cwiková, O., & Tomášková, V. (2025). Antibacterial effects of microgreens. *Institute of Food Technology, Faculty of Agronomy, MENDELU*. https://doi.mendelu.cz/artkey/doi-990009-4600_antibakterialni-ucinky-microgreens-antibacterial-effects-of-microgreens.php

FUN FACTS

Tatsoi Loves Iodine

Give tatsoi microgreens a tiny iodine boost, and they pack more iodine than basil or cilantro. Some scientists even test them as space food.

Small doses work best, and varieties can behave differently across batches.

UV Shapes Mustard

A gentle kind of UV light can help mustard microgreens grow bigger leaves, make more vitamin E, and lower nitrates, without hurting yield. Smart lighting lets growers fine tune taste and nutrition safely at home.

Buckwheat Sunlight Caution

Buckwheat microgreens can build light sensitive pigments, fagopyrins, that may cause rashes when someone eats a lot and then spends time in sun. Levels differ by variety and plant parts, so use moderation and test slowly.

WELCOME NEW MEMBERS

NAME	CITY	COUNTRY
Andrian Diasdea	Buenos Aires	Argentina
Ruman Azarah	Tel Aviv	Israel
Umasuthan Ravi	Kuala Lumpur	Malaysia
Dale Gribble	Albany	USA
S. Halloway	New York	USA
Gina Marie	Miami	USA
Ashton H	Boise	USA
Aly Beary	Nashville	USA
Carla Brey	Phoenix	USA





Doc Green, Your Microgreens Research Assistant

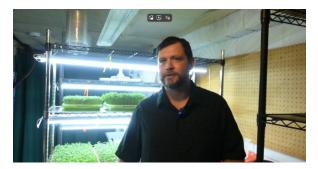
Coming Soon!

For years, growers, chefs, and researchers have been guessing their way through microgreens...

The World's First Software Suite Built for Microgreens — Enhanced by Al

Stop wasting seeds, time, and energy.
Whether you want to boost your health, scale your farm, or advance science, these tools give you shortcuts, systems, and insights — no matter who you are.

COMMUNITY CORNER



Basement Farm Proves Small Space, Big Nutrition

Michael Morris runs <u>Mike Grow Greens</u> from his Bloomington-Normal basement. He grows thousands of microgreens on racks under LED lights and sells them at the Downtown Bloomington Farmers Market. Morris can harvest and package the greens Friday night for Saturday sales. The whole growing cycle takes 8-12 days.

Polish research published in Molecules shows selected microgreens like broccoli, radish, and kale work as functional foods. Morris explains that microgreens contain all nutrients needed for plant development, packed into tiny seedlings. "Everything the whole plant needs to mature is in the little seedling," he says. "So, it has way more dense nutrition in there."

The health benefits got Morris started. His Florida background taught him indoor growing solved soil problems. He began during COVID when his family had extra time. Now he grows varieties including sunflower, radishes, mustards, peas, broccoli, and arugula. His best sellers are mixed varieties. He prefers spicy greens with peppery kicks.

The process is simple: specialty soil, thousands of seeds, water, and a brick on top to mimic earth weight. The greens lift the brick as they grow. Morris harvests three times his regular job at Rivian allows. His 2-year-old son helps water the trays.

You can use microgreens in smoothies or sandwiches. Morris suggests trying them on German butterbrot - open-faced sandwiches with quality bread, butter, and toppings. The flavor is complex and fresh.

Indoor growing means year-round production without seasonal limits. Start your own microgreen setup today for concentrated nutrition in every bite.

Source: Alkire, D. (2024, August 22). The cutting board: Checking out microgreens with Mike Grow Greens, an urban farm in Normal. *The Pantagraph*. https://pantagraph.com/life-entertainment/local/food-drink/article_14388550-5494-4843-88db-f56bc781l8ac.html



Growing Microgreens Changes Everything for Restaurants

Oscar Chavez turned his marketing background into something unexpected—a thriving microgreen farm that supplies restaurants across Conway, South Carolina. His story shows how small-scale farming can work anywhere, even without traditional farming experience.

At Microledon Farm, Chavez grows microgreens using vertical systems that fit indoors. He spent six months knocking on restaurant doors before landing his first client. Now chefs rely on his colorful varieties like garnet amaranth and cantaloupe microgreens to make their dishes pop.

The secret? These tiny greens pack massive nutrition. Broccoli microgreens contain high levels of sulforaphane—the same compound that makes mature broccoli healthy. But here's the kicker: you eat them raw, so you get all the benefits without cooking them away.

The flavors are often milder than full-grown vegetables, making them perfect for people who struggle with strong tastes.

Chavez designed his operation around human-scale tools and tight plantings. No tractors needed. His beds fit what two hands can manage. The farm runs year-round lettuce production, supplies two farmers markets, and offers home delivery through their CSA program.

The business model works because restaurants pay premium prices for fresh, local microgreens that arrive the same day they're harvested. Chavez even hosts farm dinners to connect chefs directly with their food source.

Your windowsill could become your pharmacy. Start growing your own microgreens today.

Source: McNulty, A. (2025, August 19). *Microledon Farm in Conway, SC* [Video]. Clemson Extension. <u>Microledon Farm | Making It Grow-</u>YouTube

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Two Giants Just Changed Indoor Microgreens Forever

Remember when you had to drive across town just to find microgreens at some fancy grocery store? Those days are about to end. Two major players in indoor farming, 80 Acres Farms and Soli Organic, just merged to create something huge—a \$200 million indoor farming powerhouse that will make microgreens accessible to everyone.

This isn't just corporate news. The combined company will serve more than 17,000 retail locations across the U.S. That means microgreens will show up in your local supermarket, your neighborhood deli, and maybe even that gas station convenience store. The days of hunting for these nutrient-packed plants are over.

What makes this merger special is the scale. With seven nationally distributed vertical farms, the company has the capacity to grow 15-20 million pounds of fresh produce annually, including microgreens. They're using Al-powered systems to make sure your microgreens stay fresh and taste great.

But here's what really matters for your health: The company will offer a wide range of fresh, clean, ready-to-eat products that are pesticide-free and heavy metal-free. You won't have to worry about what's on your food anymore.

The best part? The company is positioned to lead the next phase of growth in indoor agriculture with a steady supply of the cleanest produce in the marketplace. This means reliable access to the nutrient powerhouse that microgreens represent.

Source: PR Newswire. (2025, August 18). Indoor farming leaders unite to build a national powerhouse. PR Newswire.

 ${\color{blue} https://www.prnewswire.com/news-releases/indoor-farming-leaders-unite-to-build-a-national-powerhouse-302531709.html}$



School Kids Grow Food Better

A former advertising executive from Delhi traded corporate campaigns for classroom gardens, and the results will change how you think about microgreens. Pragati Chaswal launched SowGood Foundation after watching her son push vegetables around his plate with complete disconnection from their source.

Her three-year program has reached 72,000 children across 22 schools. Students start by observing nature, then manage their own plots, and finish by teaching others. The transformation is real—one student, Lila, now grows microgreens in discarded containers at home and convinced her family to ditch plastic food wrapping.

Here's what caught my attention: these kids develop patience through failed plantings, then experience pure victory when seeds finally sprout. They learn companion planting and watch their microgreens grow from soil they've prepared themselves. The program turns theoretical nutrition into tangible experience.

Schools report lasting changes. Students segregate waste and use steel lunch boxes instead of plastic. They take ownership of their school farms. Teachers see enthusiasm spread through entire schools.

The pandemic couldn't stop them—SowGood distributed seed kits so children could grow microgreens at home. Government schools participate free through corporate funding, while private schools pay for the program.

Think about this: when children connect with where food comes from, they become natural advocates for better eating habits. They understand why vegetables matter because they've grown them.

Source: Chaswal, P. (2025, August 6). Delhi mother left advertising career to teach 72000 kids farming & sustainability in schools. The Better India. https://thebetterindia.com/482194/pragati-chaswal-sowgood-foundation-educates-sustainability-farming-delhi-schools/

CREATIVE RECIPES



Culinary Onion Journey

Around 2000 BC, Mesopotamian cooks etched onion recipes on clay tablets. Our kitchen staple has been making people cry for 4,000 years.

Ancient Egyptians adored onions. Those rings symbolized eternal life, and pyramid workers ate onions for stamina. Onions pack nutrition.

Romans believed onions could heal everything from toothaches to dog bites. Medieval cooks learned layering onions with salt preserved meat for storage.

The game-changer came with cooking evolution. Medieval nobles popularized caramelization, creating that sweet, rich flavor we love. French onion soup became so fancy kings demanded recipes.

Modern science proved what ancient cooks suspected: onions are medicine. Research shows sautéing and baking increase quercetin—a powerful antioxidant—by 7-25%. Boiling destroys 30% of compounds, so save onion water for soup!



The Pyramid Builder's Power Soup: Flash-Fired Onion Microgreens with Golden Broth

Remember those pyramid workers who ate onions for stamina? They were onto something brilliant.

This soup takes that ancient energy secret and amplifies it with modern microgreen science. When you flash-cook onion microgreens for just 90 seconds, magic happens! The cell walls break down, releasing concentrated sulphur compounds and that sharp, peppery bite that makes your taste buds wake up.

I discovered this technique while experimenting with microgreen cooking methods. The microgreens keep their structure but release incredible depth of flavor, concentrated onion essence meeting fresh pepper heat.

Those ancient cooks would have traded their best clay pots for this recipe.



Recipe Information

Prep Time: 15 minutes
Cook Time: 30 minutes
Category: Soup

Method: Stovetop

Cuisine: Ancient-inspired Modern

Yield: 4 generous servings



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Ingredients

For the Base

- · 2 tablespoons olive oil
- · 2 large yellow onions, diced
- · 3 medium Yukon potatoes, diced (about 1 pound)
- · 4 cups vegetable or chicken stock
- · 1 cup whole milk
- 2 tablespoons butter
- · 1 teaspoon salt
- · 1/2 teaspoon white pepper
- · 2 bay leaves

For the Flash-cooked microgreens:

- · 2 oz mixed onion microgreens (red, yellow, white varieties)
- · 1 tablespoon olive oil
- · Pinch of salt
- · 1/4 teaspoon smoked paprika

For Finishing:

- · 2 tablespoons crème fraîche
- · Toasted sourdough croutons
- · Freshly cracked black pepper



Preparation

Build the base

- 1. Heat olive oil in a heavy-bottomed pot over medium heat.
- Add diced onions and cook 8-10 minutes until translucent and starting to caramelize.
- 3. Add potatoes, stock, bay leaves, salt, and white pepper.
- 4. Bring to a boil, then reduce heat and simmer 15 minutes until potatoes are fork tender.

Create the creamy foundation

- 5. Remove bay leaves.
- 6. Use an immersion blender to puree about half the soup, leaving chunks for texture.
- 7. Stir in milk and butter.
- 8. Keep warm over low heat.



Preparation

(continued)

Flash-cook the microgreens

- Heat a large skillet over mediumhigh heat.
- Add olive oil and heat until shimmering.
- Add all onion microgreens at once with a pinch of salt.
- 12. Toss rapidly for 60-90 seconds until microgreens are just wilted but still have bite. The stems should remain crisp, and leaves should be bright.
- 13. Sprinkle with smoked paprika and remove from heat immediately.

Combine

- 14. Stir the flash-cooked microgreens directly into the warm soup. The residual heat will continue cooking them gently.
- 15. Taste and adjust seasoning.



Plating

Ladle soup into warmed bowls.

Each serving should have visible microgreens throughout—they're the stars, not hidden.

Drop a dollop of crème fraîche in the center.

Add 3-4 toasted sourdough croutons around the edge.

Finish with freshly cracked black pepper and serve immediately while the microgreens retain their texture.



Benefits of Onion Microgreens for Health

Red onion microgreens contain the highest concentration of anthocyanins—those deep purple pigments that support cardiovascular health. Yellow varieties deliver steady quercetin levels that research links to reduced inflammation markers. White onion microgreens offer the mildest flavor with concentrated allicin, the same compound that gives garlic its health benefits.

The flash-cooking method preserves heat-sensitive vitamins while unlocking fat-soluble nutrients. Your body absorbs these compounds 40% more efficiently when microgreens are lightly cooked versus raw. That 90-second window is the sweet spot—long enough to activate nutrients, short enough to maintain structure and peppery punch.

IN THE NEWS

Brain Lithium Deficiency Signals Early Alzheimer's

Scientists made a big discovery about your brain, and a mineral called lithium. Researchers from Harvard Medical School found that people with Alzheimer's disease have much lower lithium levels in their brains compared to healthy people.

The study looked at brain tissue from 27 different people and tested mice too. Out of 27 trace metals they checked, lithium was the only one that dropped significantly in Alzheimer's patients. The drop happens early, even before memory problems get bad.

When researchers gave mice diets low in lithium, the mice aged faster and got brain inflammation. But when they gave lithium back to sick mice, their brain damage reversed, and their memory got better.

Dr. Bruce Yankner, the lead researcher, thinks lithium deficiency might actually cause Alzheimer's disease. This is huge news because most treatments focus on clearing brain plaques, not fixing mineral deficiencies.

The research suggests lithium works differently than current drugs. It might not just slow down the disease but actually reverse brain damage.

Source: Medical News Today. (2025, August 25). Could lithium hold the key to treating Alzheimer's disease? *Medical News Today*.





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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