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THE HIGHLIGHT

- Brussels sprouts microgreens
 best block aging proteins
- Kohlrabi microgreens help control blood sugar spikes
- Small tech farms beat corporate giants easily
- Government funding transforms garage into microgreens empire

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

Science has made a significant discovery this week. Researchers tested six microgreen varieties and discovered that Brussels sprouts microgreens excel at blocking protein glycation—the process that speeds up aging and drives diabetes complications. Kohlrabi emerged as a champion in diabetes management, inhibiting key enzymes that break down carbohydrates into blood sugar.

Small farms proved they can outcompete corporate giants with smart systems. Plate Linguistics scaled from 840 to 36,000 square feet using custom software rather than massive funding. Their secret weapon? Quality over quantity.

Government support is transforming lives. Micro Acres Wales relocated from a garage to a former explosives facility in a mine, with backing from the Welsh Government, doubling its production capacity. Meanwhile, father-daughter team M&M Farms delivers nutrient-dense microgreens with 40 times more vitamins than mature vegetables.

Your gut bacteria control appetite through specialized colon cells that signal your brain when to stop eating. Fresh microgreens could strengthen this pathway.

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NUTRITION SCIENCE

Microgreens: One Purple Powerhouse Wins

What happens when tiny greens meet your digestive system? A groundbreaking study reveals that microgreens from the cabbage family pack a powerful punch for your health – and they keep working even after you eat them.

Scientists tested six types of microgreens: kohlrabi, Savoy cabbage, Brussels sprouts, cauliflower, radish, and garden cress. They wanted to see how these baby plants behave in your body during digestion. The results show these little greens are nutritional powerhouses that could help manage diabetes and fight aging.

Brussels sprouts microgreens topped the charts for blocking protein glycation. This process speeds up aging and contributes to diabetes complications. Garden cress had the lowest sugar content, making it an ideal choice for individuals monitoring their blood sugar levels. Savoy cabbage and Brussels sprouts contained the highest levels of glucosinolates, compounds known for their cancer-fighting properties.

The study's most exciting discovery centers on what happens after you eat these microgreens. Using in vitro digestion – a scientifically validated method that replicates the complex biochemical conditions of human digestion – researchers tracked how the plants' beneficial compounds survive stomach acid and digestive enzymes. Kohlrabi emerged as the clear winner for diabetes management. It best inhibited two key enzymes – α -amylase and α -glucosidase – that break down carbohydrates into glucose, a form of blood sugar. This means kohlrabi microgreens could help slow sugar absorption and prevent blood sugar spikes.

Antioxidant activity tells another compelling story. All microgreens demonstrated antioxidant power equal to or greater than that of synthetic antioxidants before digestion. Kohlrabi's antioxidant strength remained consistent throughout the entire digestive process, while that of other varieties decreased.

The research revealed something fascinating about how digestion affects these plants. As the microgreens progressed through simulated digestion phases, they became increasingly similar to one another.



This suggests that while raw microgreens have different nutritional profiles, your digestive system processes them in a way that creates more uniform benefits.

Radish microgreens contained the highest levels of vitamin C and kaempferol, a flavonoid linked to heart health. Garden cress packed the most vitamin C in its bound form, which may provide longer-lasting benefits as it releases slowly during digestion.

The correlation between compounds and health benefits surprised researchers. Brussels sprouts' ability to fight protein glycation strongly correlated with sinapic acid levels – a finding that could guide future research into anti-aging foods. The connection between antioxidant power and enzyme inhibition suggests these compounds work together to provide multiple health benefits.

Three microgreens - kohlrabi, Savoy cabbage, and garden cress - maintained their ability to inhibit both diabetes-related enzymes even after complete digestion. This staying power makes them particularly valuable for long-term health benefits.

For the first time, scientists investigated the antidiabetic potential of microgreens after digestion. Previous research has only examined raw plants, missing the crucial question of what actually happens in the body. This study shows that many beneficial compounds survive digestion and remain active where your body needs them most.

The practical implications are clear. Adding microgreens to your daily diet may provide sustained health benefits that benefit your entire digestive system. Kohlrabi offers the best support for diabetes, Brussels sprouts help fight aging, and garden cress provides low-sugar nutrition with lasting benefits.

These findings significantly transform our understanding of how microgreens interact with the human body. Rather than just providing nutrients that disappear during digestion, these tiny plants deliver compounds that remain active and beneficial throughout the entire digestive process.

While in vitro digestion provides valuable insights into the behavior and bioavailability of compounds, real-world factors such as individual gut microbiomes, food interactions, and metabolic variations may yield different results. Human studies would strengthen these promising findings and confirm their clinical relevance.

Source: Citation: Šola, I., Vujčić Bok, V., Popović, M., & Gagić, S. (2024). Phytochemical composition and functional properties of Brassicaceae microgreens: Impact of in vitro digestion. International Journal of Molecular Sciences, 25(21), 11831. https://doi.org/10.3390/ijms252111831

FUN FACTS

Cellular Regeneration Powerhouse

Alfalfa microgreens contain 5,392 mg/kg of agmatine, a cellular regeneration compound that supports immune function, DNA stability, and tissue repair processes more effectively than mature plants throughout the body.

Sugar Metabolism Booster

Fenugreek microgreens enhance cellular glucose uptake by 44% while simultaneously blocking dietary sugar absorption by 70%, creating a remarkable dual metabolic advantage for optimal blood sugar management and control.

Water Efficiency Champion

Microgreens require 158-236 times less water than mature vegetables to produce equivalent nutritional value, making them remarkably sustainable and resource-efficient alternatives for producing nutrient-dense food in water-scarce environments.

WELCOME NEW MEMBERS

NAME	CITY	COUNTRY
Paolo Kunduktar	Woodbridge	Canada
Vinod Chodhary	Kedarnath	India
Raghupathi Ramamurthy	Coimbatore	India
Ravi Ranjan Ray	Mumbai	India
Srinivasan Govindan	Mysuru	India
Nivya K Nandanan	Kochi	India
R J Raj	Raipur	India
Chaitanya Dhanorkar	Surat	India
Akshay Km	Kochi	India
Ashu Tomar	Agra	India
Akshay Tomar	Dehradun	India
Laxmi Dixit	Bhopal	India
Emma Wangec	Nairobi	Kenya
Raul Ignacio	Cancun	Mexico
Obed Santiago Gallego	Ponce	Puerto Rico
Jan Boneschans	Pretoria	South Africa
Navjeet Rai	Sharjah	United Arab Emirates
Derick		United States
Lilly Jaya Sheela		United States
Kevin Grames	Toledo	United States
Marie	Bloomsburg	Unites States
Mary Jane Foster	Dallas	Unites States
Darlene Pallay	Pittsburgh	Unites States
Debra	Los Angeles	Unites States
Cheryl StClair	Seattle	Unites States
Mercedes Prietom	Miami	Unites States
Rio E Dunn	Fort Myers	Unites States



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COMMUNITY CORNER



Small Tech-Driven Farms Beat Corporate Giants

<u>Plate Linguistics</u> proves that small microgreens farms can succeed with smart technology rather than massive funding.

Bryant developed custom software that accurately predicted what to plant and when, reducing waste while increasing profits.

Their walk-in germinator-controlled timing down to the hour. QR codes tracked every planting group through harvest. The system generated daily reports showing which crops needed attention.

Chefs loved their premium quality so much that one distributor replaced all existing suppliers after tasting samples.

The farm scaled from 840 square feet to 36,000 square feet based on product excellence, not investor money. Their secret weapon was a combination of data-driven decisions and gut instinct.

Every crop got tracked from seed to sale. You don't need millions to start. You need systems that work. Home growers can apply these tracking methods to maximize yields in small spaces. Commercial growers should focus on quality over quantity to command premium prices.

Retailers benefit from partnering with tech-savvy small farms that deliver consistent products. Chefs get reliable harvests when they need them. The lesson is clear: smart farming beats big farming every time. Start tracking your growth today and watch efficiency soar.

Quality wins over quantity.

Source: Bryant. (2025, July 26). Farming smarter, not bigger: How Plate Linguistics took on urban ag. Agritecture. https://www.agritecture.com/blog/the-plate-linguistics-cea-journey



Father-Daughter Team Shows Microgreens' Hidden

Nutritional Power

Matt Sanderson, a self-employed gutter contractor from Fulton, Illinois, started growing microgreens in his indoor facility last year for personal use.

His daughter Gracie, a college athlete, got involved because healthy eating matters for athletic performance and fueling your body correctly.

They discovered something amazing: microgreens pack up to 40 times more nutrients than their adult vegetable counterparts.

Matt brought a visual example showing that a small tray of broccoli microgreens equals the same nutritional content as a much larger portion of adult broccoli. This makes it easier to sneak nutrition into kids' foods through tacos, wraps, smoothies, soups, and avocado toast without the usual mealtime battles.

Their home delivery service requires a \$20 minimum order, which gets you eight ounces of product delivered right to your door.

You can contact them through their Facebook page, M&M Farms, where Gracie handles orders and customer requests personally.

They're scaling their business to help more people access these nutrient-dense foods in their local area. The demand has been so strong they frequently sell out, but their facility can scale to any size needed.

They're running a Quad Cities special and a contest where customers can win free microgreens by sharing photos or videos of their kids eating microgreens.

Start adding these nutritional powerhouses to your family's diet today.

Source: Sanderson, M., & Sanderson, G. (2025). M&M Farms microgreens interview [Video]. KWQC TV6. https://www.youtube.com/watch?v=xwmYpq_h1Ck



Indoor Farms Prove Microgreens Pack Serious Nutrition

Barn Girls Farms began when private investigator Gunnar Christensen broke his arm and turned to growing microgreens as a way to pass the time.

Now he and his wife, Stephanie, run an indoor farm, proving that these tiny plants pack 40 to 80 times more nutrients than their full-grown versions.

Their 2,000-square-foot facility in Ralston grows 18 varieties that supply about 20 Omaha restaurants.

Each microgreen offers specific nutritional value with intense flavors. Broccoli microgreens taste exactly like broccoli but with concentrated nutrients.

The couple discovered that the fast three-week growing cycle means they can harvest fresh produce year-round. Home growers can start with simple 10-inch trays from online kits. Commercial growers need dedication and willingness to adapt when crops fail.

The business hosts farmers' markets and creates community gathering spaces. Their success demonstrates that microgreens offer significant health benefits in a compact package.

The concentrated nutrition means you get maximum vitamins and minerals from minimal space. Start small, stay committed, and watch your health improve with these nutrient-dense powerhouses.

Source: Seeds of Change: Barn Girls Farms Embraces the Benefits of Microgreens. (2025). Metro Business Journal. https://www.mbj.com/events/impact_250/seeds-of-change-barn-girls-farms-embraces-microgreens-benefits/article_5944d421-038a-42a2-9a65-bbfa0b0e4428.html



Government Funding Transforms Garage Into Microgreens
Empire

Micro Acres Wales proves government support can change lives and businesses. Chris and Donna Graves started with one tray on their windowsill during lockdown in 2021. Chris was diagnosed with ataxia, a condition affecting coordination and balance, making traditional work difficult.

Their garage-based hobby became a lifeline when Welsh Government's Project HELIX provided technical support through Cardiff Metropolitan University. The couple moved from their garage to a former mine explosives facility, more than doubling production capacity with a perfect food hygiene rating of five. They now grow award-winning microgreens, edible flowers, and mushrooms using sustainable vertical farming methods that exclude the use of pesticides.

Their output increased by 50% immediately, with the potential to double again within months. This family business shows how microgreens offer second chances and new career paths for anyone facing challenges. Home growers can start like they did with one windowsill tray and scale up gradually over time. Commercial growers should explore government funding programs for expansion opportunities in their regions.

The Graves family proves that health challenges can become business opportunities when you choose nutrient-dense foods. Their success demonstrates microgreens farming creates viable livelihoods while improving community health. Start small, think big, and research available support programs in your area today.

Source: Butler, B. (2025). Expansion for South Wales microgreens company follows Welsh Government funded support. Insider Media. https://www.insidermedia.com/news/wales/expansion-for-south-wales-

microgreens-company-follows-welsh-government-funded-support

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CREATIVE RECIPES



Ancient Cabbage Cousin

Kohlrabi first appeared in European records in 1554 when botanist Matthiolus wrote that it had "come lately into Italy." By the 1600s, this hardy vegetable spread across Germany, England, Spain, Tripoli, and the eastern Mediterranean. The name originates from German words meaning "cabbage turnip." However, it evolved from wild marrow cabbage that grew on European coasts.

Records show kohlrabi reached America by 1806, but it truly found culinary homes worldwide. In Kashmir, where it grows easily in harsh winters, locals call it "monji" and cook it into beloved comfort dishes with mustard oil and green chilies. Vietnamese cooks stir-fry it with garlic and add it to soups, while Germans have roasted and braised it for centuries.

What drove its historical popularity? One cup provides 93% of daily vitamin C needs - crucial for sailors and winter nutrition when fresh food was scarce. This made kohlrabi a lifesaver in cold climates and long voyages, cementing its place in global kitchens from Europe to Asia.



Monji Memories: Kashmiri Kohlrabi Microgreen **Dumplings with Saffron-Mustard Broth**

Drawing from the ancient Kashmiri tradition where kohlrabi (called "monji") sustained families through harsh winters, this dish reimagines that comfort through modern technique.

Just as Kashmiri cooks have treasured every part of the kohlrabi plant for centuries, we celebrate both the mature bulb and its nutrient-dense microgreens in perfect harmony.

The purple-stemmed microgreens aren't mere decoration - they're woven into silky dumpling wrappers that capture the essence of what made kohlrabi a winter lifeline across continents.

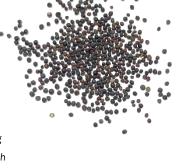


Recipe Information

Prep Time: 45 minutes Cook Time: 25 minutes Category: Main Course

Method: Steaming, Slow cooking Cuisine: Modern Kashmiri-British

Yield: 4 servings



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Ingredients

For the Dumplings:

- · 2 cups kohlrabi microgreens, stems and leaves separated
- · 1 large kohlrabi bulb, peeled and grated fine
- · 200g rice flour
- · 100ml warm vegetable stock
- · 1 tsp sea salt
- · 2 tbsp mustard oil
- · 1/2 tsp ground fennel

For the Saffron-Mustard Broth

- · 600ml light vegetable stock
- · Pinch saffron threads
- · 2 tbsp mustard oil
- · 4 green chilies, slit lengthwise
- 1 tsp cumin seeds
- 1/2 tsp asafoetida
- Salt to taste
- · 1 cup kohlrabi microgreen leaves, chopped

3

Preparation

- Begin by creating the dumpling wrapper dough.
- 2. Blanch half the kohlrabi microgreens for 30 seconds, then shock in ice water.
- Blend these blanched greens with rice flour, warm stock, and salt
 until you achieve a smooth, pale green dough. The microgreens
 add both color and a subtle peppery note that echoes the mature
 plant's character.
- 4. For the filling, combine grated kohlrabi with chopped microgreen stems, mustard oil, and fennel. The microgreen stems provide textural contrast and concentrated flavor, serving as the bridge between the dumpling's exterior and the tender kohlrabi within.
- 5. Roll the green-tinted dough thin and cut into 4-inch squares.



Preparation

(continued)

- Place spoonfuls of filling in centers, then fold into triangular parcels, sealing edges with water.
- Steam the dumplings for 12 minutes, until they are tender and translucent.
- Meanwhile, warm the mustard oil in a heavy pan, add the cumin seeds and asafoetida, and cook until fragrant.
- Pour in the stock, add the saffron and green chilies, and then simmer gently for 8 minutes.
- Stir in chopped microgreen leaves just before serving - they wilt quickly but retain their nutritional punch.



Plating

Arrange 3-4 dumplings in each shallow bowl.

Ladle the golden broth around them, ensuring each serving gets plenty of the wilted microgreens.

The final dish should shimmer with mustard oil and saffron, while the green-hued dumplings float like little parcels of history.

For more innovative techniques like these, explore the work of Michelin-starred chef Simon Rogan at L'Enclume and Fera at Claridges, where boundary-pushing cuisine meets respect for traditional ingredients.

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Benefits of Radish and Parsley Microgreens for Health

Kohlrabi microgreens pack 40 times more nutrients than their mature counterparts. Rich in vitamins C, E, and K, plus folate and beta-carotene, they support immune function and cellular repair.

The purple stems contain anthocyanins - powerful antioxidants that combat inflammation. Their peppery bite comes from glucosinolates, compounds that support liver detoxification.

At just 10-14 days old, these microgreens deliver maximum nutrition in their most bioavailable form, making them perfect for health-conscious diners seeking both flavor and wellness benefits.

IN THE NEWS

Gut Bacteria Control Your Natural Appetite

Scientists have discovered that your colon has specialized cells that function like a built-in appetite control system. When you eat, gut bacteria release a protein called flagellin that triggers hormone production. This sends "stop eating" signals straight to your brain through the vagus nerve. Mice without this system ate more and gained weight. Here's what matters: different bacteria produce different types of flagellin. Fresh microgreens contain diverse beneficial bacteria that could strengthen this natural appetite control pathway. Growing your own microgreens means you control the bacterial diversity entering your gut. The research suggests that enhancing gut bacteria through diet, such as adding nutrient-dense microgreens, might boost your body's natural fullness signals without side effects.

Source: Bohórquez, D., & Kaelberer, M. (2025, July 23). Your colon's got a sixth sense — how it can lead to weight loss. New York Post. https://nypost.com/2025/07/23/health/your-colons-got-a-sixth-sense-how-it-can-lead-to-weight-loss/





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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