



The Ultimate Guide to Broccoli Microgreens Nutrition including Nutrition Data, Facts, Info, and Recipes

We love our greens, especially broccoli, and broccoli [microgreens nutrition](#) is something we talk about a lot in our house.

Are broccoli microgreens healthy? We think so.

We have very close friends who have survived or have died from cancer. My wife's best friend changed her nutrition to be more plant-based after she had breast cancer. That's when we learned about sulforaphane, one of the critical micronutrients in fighting cancer.

Turns out that broccoli is high in sulforaphane. Broccoli microgreens sulforaphane is even higher and more potent than sprouts or mature broccoli.

The nutrition in broccoli microgreens is tremendous and includes

- **vitamins A, B, C, E, and K,**
- **macro-elements calcium, magnesium, and phosphorous,**

- **and micro-elements iron, copper, and zinc.**

Even more broccoli microgreens benefits include reversing chronic illnesses such as heart disease and type II diabetes.

This post is your ultimate guide to the nutrition of broccoli microgreens.

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What are broccoli microgreens?

Microgreens are a group of fresh specialty food, which are now very popular among chefs and health-conscious consumers worldwide.

Broccoli seeds are harvested when their **embryonic leaves**ⁱ are fully developed, and the first pair of real leaves are emerging or partially expanded (about 7 – 9 days).

Broccoli microgreens are these young seedlings of the broccoli plant, a Brassicaceae family member, which also includes [arugula](#), cabbage, and radish. The Brassicaceae microgreens are well known and valued for cancer-fighting glucosinolates and carotenoid phytochemicals.

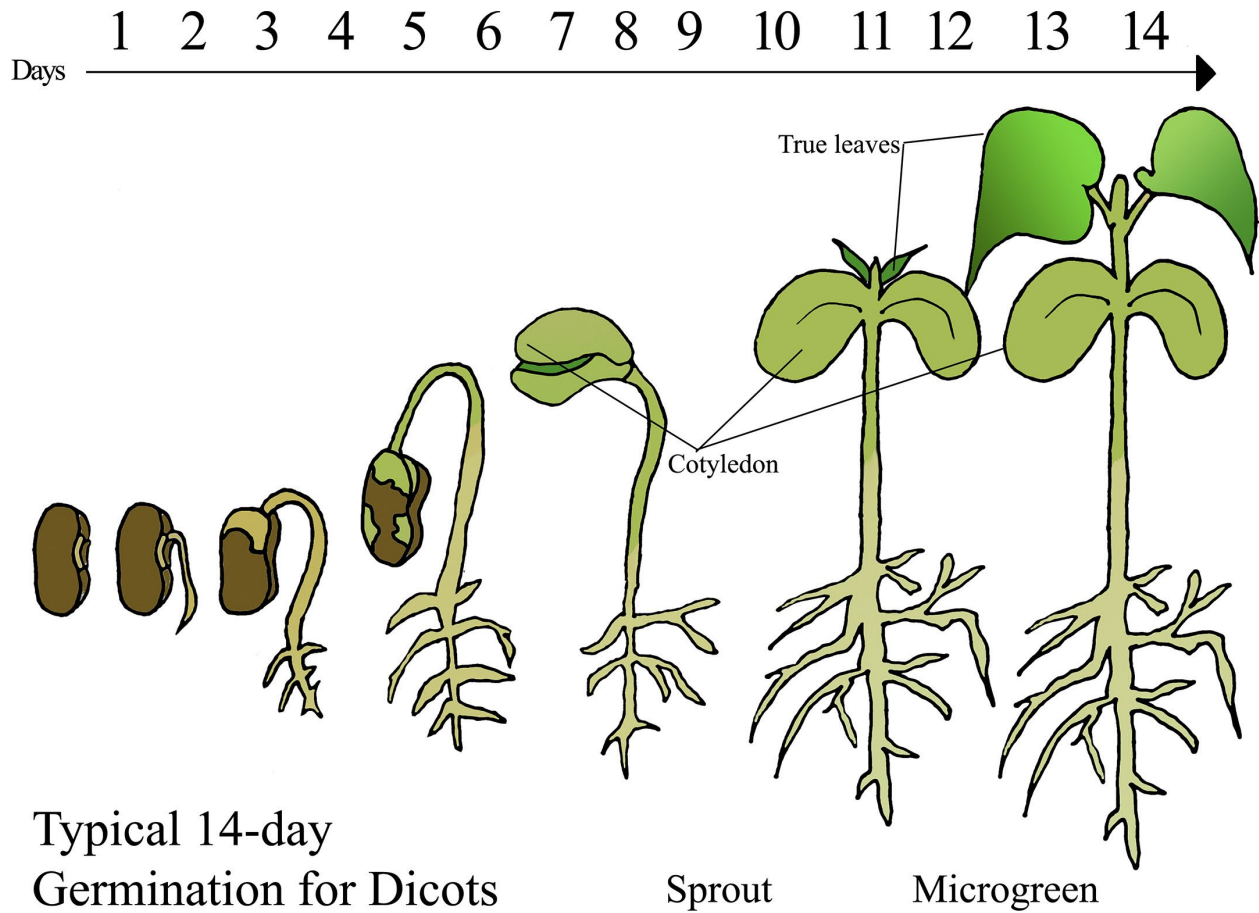


Figure 1 Microgreens and sprouts differ by age at harvest. A typical 14-day germination period for a dicot, using the common garden bean as an example. Germination period for microgreens and sprouts varies by plantⁱⁱ

Broccoli microgreens nutrition info

We are all concerned about our health and focused on improving our nutrition.

The scientific research into microgreens and broccoli microgreens nutritional value continues.

Table 1 below lists the most essential broccoli microgreens nutrition data that available:

| Commercial name | Broccoli microgreens |
|-------------------------------------|--|
| Scientific name (genus and species) | <i>Brassica oleracea L. var. italica</i> |
| Planting | Between 10 – 12 seed per square inch |
| Growth length (day) | 7-9 days |
| Growth height | Between 1–2 inches tall. |

| Commercial name | Broccoli microgreens |
|---|----------------------|
| Macro-elements per mg/100 g of Fresh Weight (FW) | |
| Calcium (Ca) | 88 mg |
| Magnesium (Mg) | 51 mg |
| Phosphorous (P) | 69 mg |
| Potassium (K) | 326 mg |
| Sodium (Na) | 52 mg |
| Nitrates (NO ₃) | 267 mg |
| Micro-element minerals per mg/100 g FW | |
| Iron (Fe) | 0.67 mg |
| Zinc (Zn) | 0.37 mg |
| Copper (Cu) | 0.09 mg |
| Manganese (Mn) | 0.37 mg |
| Cadmium (Cd) | < 0.0001mg |
| Lead (Pb) | < 0.0001mg |
| Vitamin Content | |
| Vitamin A (β-carotene) | 221.80 mg |
| Vitamin C (Ascorbic Acid) | 51.0 mg |
| Vitamin E (tocepherol) | 24.1 mg |
| Vitamin K (Phylloquinone) | 2.8 ug |
| Antioxidant bioactive compounds (Bioaccessibility %) | |
| Glucoraphanin | 4.8 μmol / g |
| Total isothiocyanates (sulforaphane) | 633.11mg, 32.30% |
| Total anthocyanins (cyanidin-3-glucose) | 12.66, 0% |
| Total soluble polyphenols | 2017.38, 70.09% |
| Other Nutrients | |
| Fiber | 410 mg |
| Broccoli Microgreens Protein | 2300 mg |

Table 1 Broccoli microgreens nutrition facts

According to the United States Department of Agriculture (USDA), broccoli microgreens calories are about 31 calories per 100 g of fresh weight (FW).

Broccoli microgreens protein is about 2.3 g per 100 g FW.

Broccoli microgreen carbs are about 7 gm per 100 g FW of produce.

Broccoli Microgreens Nutrition Facts

Broccoli microgreens are rich in nutrients.

| | |
|-----------|------|
| Magnesium | 20 % |
| Zinc | 20 % |
| Manganese | 50 % |

Amount in cereal

Carotenoids. Provitamin A is an essential fat-soluble antioxidant and can protect cellular membranes by scavenging free radicals.

Ascorbic Acid. Vitamin C is an **essential nutrient** for the human body, acting as an antioxidant. It is necessary for growth, development, repairs different body tissues, involved in the formation of collagen, absorption of iron, wound healing, and ensures the immune system's proper functioning.

Tocopherols. Tocopherols and tocotrienols are together summarized as "vitamin E," known as fat-soluble **antioxidants**. Alpha-tocopherol is the only one used by the human

body and is vitally important to your vision, reproduction, and the health of your blood, brain, and skin.

Phylloquinone. Vitamin K1 is a fat-soluble vitamin and makes proteins necessary for blood clotting and healthy bones. According to the Harvard School of Public Health, vitamin K helps produce four out of 13 blood clotting proteins. The "K" comes from the German word "koagulation."

Lutein/Zeaxanthin. Lutein and zeaxanthin are xanthophyll carotenoids, accumulating in the macula of human eyes. Numerous epidemiological studies have shown that lutein and zeaxanthin play a critical role in preventing age-related macular degeneration and cataract.

As you build your strategy for better health, consider the nutrition of broccoli microgreens to meet your Recommended Dietary Allowance (RDA)ⁱⁱⁱ for essential elements.

Health benefits of broccoli microgreens

Suppose you and I don't get enough of the macro- and micro-elements found in broccoli microgreens. In that case, we can suffer from metabolic disorders and organ damage, leading to acute and chronic diseases and even death.

According to the World Health Organization (WHO), chronic diseases are a significant cause of death globally.

*Chronic diseases, particularly cardiovascular disease (CVD), type 2 diabetes, cancer, and chronic respiratory disease, account for more than 50% of all deaths worldwide. Tobacco use, **poor diet**, and physical inactivity are among the major risk factors contributing to this disease burden.^{iv}*

Broccoli microgreens sulforaphane

Glucoraphanin, a sulfur-producing glucosinolate, is the precursor to sulforaphane. Sulforaphane is the **most beneficial compound** in broccoli microgreens.

Several studies have shown that broccoli microgreens high in glucoraphanin decreased oxidative stress and inflammation in kidneys and reduced blood pressure in the cardiovascular system.

Other studies have shown that sulforaphane is a potential candidate drug for AD therapy and prevention.

Sulforaphane has also been shown to reduce inflammation in the respiratory pathways and the symptoms of asthma.

The sulforaphane and carotenoids in broccoli contain powerful oxidants that heal the damage to our eyes' retinal cells.

New studies^v also show that sulforaphane reduces glucose production in your liver and improves glucose control in patients with type 2 diabetes.

Broccoli microgreens and cancer prevention

Numerous studies^{vi} show that sulforaphane is a safe and relatively nontoxic chemopreventive agent that uses anticancer activities.

At least one study^{vii} has shown that eating broccoli microgreens may help prevent colon cancer and possibly other cancers.

Many of us have gastronomical problems. Researchers now believe that eating broccoli microgreens every day blocks the *Helicobacter pylori* bacteria's growth and reduces gastritis in patients infected with the bacteria. Gastric cancer risk increases as much as six-fold in individuals infected with *H. pylori*.

Another study^{viii} has shown that eating broccoli microgreens inhibits breast cancer stem cells.

The polyphenols and glucosinolates in broccoli microgreens are a broad category of bioactive compounds that have been associated with preventing several chronic diseases, including **cardiovascular disease**, **obesity**, and **cancers**.

Broccoli Microgreens Nutrition vs Broccoli

Mature broccoli plants like Green magic broccoli are also full of different minerals, vitamin C, and A and rich in iron.



The chemical composition of a microgreen differs considerably from that of the mature form.

When you compare broccoli microgreens vs. broccoli, you can see the following:

| | Microgreens mg/100 g | Amount of Fresh Produce to satisfy the RDI | RDI |
|---------------------------|-------------------------|--|-------|
| Vitamin C (Ascorbic Acid) | 51.0 mg | 41g | 60 mg |
| Vitamin E (tocepherol) | 24.1 mg | 54g | 13 mg |
| Vitamin K (Phylloquinone) | 2.8 ug | 25g | 70 ug |

One hundred grams is about 3.5 ounces, or just under ½ cup of broccoli florets. Broccoli microgreens contain appropriate amounts of vitamin C, higher Vitamin E levels than adult plants, but lower vitamin K, making them suitable for patients with impaired kidney disease.

| | Fiber mg / 100 g | Protein mg / 100 g FP | Iron (Fe) mg / kg | Glucoraphanin µmol / g | Glucobrassicin |
|----------------------|---------------------|--------------------------|----------------------|---------------------------|----------------|
| Broccoli Microgreens | 410 | 2,300 | 0.77 | 0.85 | 7.1 |
| Adult Florets | 960 | 5,600 | 1.28 | 10.81 | 1.1 |
| Baby Greens | 430 | 3,800 | 1.25 | | |

Studies have shown broccoli microgreens have up to 10 times more sulforaphane than mature broccoli.

Broccoli microgreens vs. broccoli sprouts

Broccoli sprouts are three-to-four-day-old broccoli plants. They look like alfalfa sprouts, taste like radishes, and contain more carbs than broccoli microgreens and have a similar nutrition profile.

However, you must wash broccoli sprouts thoroughly as they have a higher risk of carrying E. coli because they grow best in moist environments.

What do broccoli microgreens taste like?

Now that we know all about the nutrition in broccoli microgreens, let's turn our attention to some of the best ways to eat broccoli microgreens so that we can avail ourselves of all the benefits of broccoli microgreens.

| Commercial Name | Family | Plant Color | Taste | Aroma | Flavor | Intensity |
|-----------------|--------------|-------------|-------|---------|---------|-----------|
| Broccoli | Brassicaceae | Green | Tangy | Peppery | Crunchy | Mild |

The broccoli microgreens taste tangy. The broccoli microgreens smell has a mild peppery aroma. The broccoli microgreens flavor is crunchy.

They make for a great addition to your favorite dish, including tofu scramble, cooked grains, salads, soups, and sandwiches.

How to use broccoli microgreens

Broccoli microgreens are a [fantastic food for children](#) due to many nutrients like vitamins and antioxidants. Broccoli microgreens nutrition can play an essential role in boosting a child's immune system by protecting against viruses and free radicals.

How to eat broccoli microgreens

I'm not a big fan of the broccoli microgreens smoothie. But I love microgreens juices. In fact, check out one of my most potent recipes, the **LIQUID BROCOLLI ZINGER**, a juice rich in sulforaphane, nature's most potent known Nrf2 activator, and a powerful antioxidant. You can find more juice recipes by [visiting the Resource Page now](#).



You've also probably seen a broccoli microgreens recipe for salads, so you know you can eat broccoli microgreens raw. You can click here: [FREE COPY](#) to get my microgreens salad book.

But did you know that cooking broccoli microgreen is possible?

An International Journal of Scientific and Technology Research study^x looked at the effects of heat on different vegetables. It measured the percentage of vitamin C lost at 5, 15, and 30 minutes while exposed to a constant temperature of 140°F (60°C).

The pain threshold for your tongue is about 153°F (67.2°C)^x.

Now, compared to similar conventional vegetables often used to cook, raw broccoli microgreens consume three times more nutrients.

"Cooking" these broccoli microgreens for 5 minutes in a 140-180°F soup pot will still yield you at least 80-85% of the nutrient value.

That is 200% more than cooked green vegetables!

Where to buy broccoli microgreens

So, I did a bit of research for you to find the best sources globally:

Select Microgreens Vendors Around the World

INDIA

Nature Basket

https://www.naturesbasket.co.in/Online-grocery-shopping/Fruits-Vegetables/Exotic-Vegetables/Herbs-Microgreens/147_0_0

Blooming Greens

<https://www.bloominggreens.com/>

MIDDLE EAST

Madar Farms

<https://www.madarfarms.co/our-products/>

Israel

<https://www.2bfresh.com/>

EUROPE 2BFresh

Switzerland**Cyprus**

<https://www.2bfresh.com/>

Poland

USA

Fresh Origins

<http://www.freshorigins.com/our-products/microgreens/>

Farmbox Greens

<https://www.farmboxgreens.com/>

Gourmet Sweet Botanicals

https://www.shop.gourmetsweetbotanicals.com/MicroGreens_c2.htm

SLOVENIA

ReAct Green <https://reactgreens.com/>

AUSTRALIA

Sprout House Farms <https://www.sprouthousefarms.com.au/>

Pocket Herbs <https://www.pocketherbs.com.au/product-category/living-microgreens/>

JAPAN

Ameba <https://ameblo.jp/kaiware-nihaorocks/entry-12354143826.html>

Mirai Farms <https://miraigroup.jp/en/>

Or search Locally on Google "**buy microgreens near me.**"

Broccoli microgreens prices vary very little across the globe. In the USA, India, and Australia, we found the average price to be close to \$2.25 per ounce (or \$0.08 per gram).

We are selling our JPureFarms microgreens locally in the neighborhood.

If you are interested in growing broccoli microgreens at home, visit our [Resources Page](#) and check out the [Back to the Roots starter kit](#). It contains everything you need to start to grow broccoli microgreens successfully.

Want more information on Microgreens?

Broccoli microgreens nutrition is a rich source of macro and microelements beneficial in preventing and treating several chronic ailments related to your heart, eyes, aging, and digestion.

Start incorporating the health benefits of broccoli microgreens into your nutrition.

I've learned a lot about microgreens, how good they are for you, and what you can do with them. Check out my guide, "[The Beginner's Nutritional Guide to Incredible Microgreens.](#)"

ⁱ Cotyledon. (2020, July 24). Retrieved October 13, 2020, from <https://en.wikipedia.org/wiki/Cotyledon>

ⁱⁱ Riggio, G. M., Wang, Q., Kniel, K. E., & Gibson, K. E. (2019). Microgreens—A review of food safety considerations along the farm to fork continuum. *International Journal of Food Microbiology*, 290, 76-85. doi: <https://doi.org/10.1016/j.ijfoodmicro.2018.09.027>

ⁱⁱⁱ Recommended Dietary Intakes and Allowances around the World-an Introduction. (1982). *Food and Nutrition Bulletin*, 4(4), 1-14. doi: <https://doi.org/10.1177/156482658200400415>

^{iv} Yach, D., Leeder, S., Bell, J., & Kistnasamy, B. (2005, January 21). *Global Chronic Diseases*. Retrieved October 13, 2020, from <https://science.sciencemag.org/content/307/5708/317>

- ^v Brown, K. (2018, November 21). Sulforaphane Emerging as a Type 2 Diabetes Treatment. Retrieved October 13, 2020, from <https://www.longislandmicrogreens.com/blogs/news/sulforaphane-emerging-as-a-type-2-diabetes-treatment>
- ^{vi} Jiang, X., Liu, Y., Ma, L., Ji, R., Qu, Y., Xin, Y., & Lv, G. (2018, September 11). Chemopreventive activity of sulforaphane. Retrieved October 13, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6141106/>
- ^{vii} Fuente, B., López-García, G., Máñez, V., Alegría, A., Barberá, R., & Cilla, A. (2020, April 28). Antiproliferative Effect of Bioaccessible Fractions of Four Brassicaceae Microgreens on Human Colon Cancer Cells Linked to Their Phytochemical Composition. Retrieved October 13, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7278869/>
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- ^{ix} (PDF) The effect of heating on the vitamin C content of selected vegetables. (n.d.). Retrieved October 14, 2020, from https://www.researchgate.net/publication/336915722_The_effect_of_heating_on_the_vitamin_C_content_of_selected_vegetables
- ^x DW;, D. (n.d.). What Temperature of Coffee Exceeds the Pain Threshold? Pilot Study of a Sensory Analysis Method as Basis for Cancer Risk Assessment. Retrieved October 14, 2020, from <https://pubmed.ncbi.nlm.nih.gov/29857570/>