

Rating Rutabagas

NOT ALL VEGETABLES ARE CREATED EQUAL

BY BONNIE LIEBMAN & JAYNE HURLEY

It's tough to rank vegetables. No one wants to think poorly of, say, a turnip or a cucumber. They're like an Olympic athlete who finishes last in the 100-meter dash. Not the world's best perhaps, but not too shabby either.

But rankings matter. They might lead you to pick spinach salad over Caesar, or broccoli over green beans for lunch. Or you might go with sweet potatoes instead of white potatoes, peas instead of corn, and carrots over celery at dinner.

Here's our ranking of good to great veggies...and the top ten reasons why you should try them all.

The information for this article was compiled by Melissa Pryputniewicz.

1. Calories

Most vegetables have 10 to 50 calories per serving. In today's world of 600-calorie French fries or loaded baked potatoes, those numbers barely register on the radar screen. Even the exceptions—like sweet potatoes, lima beans, and avocados—hover around just 100 calories.

And vegetables are water-rich, so they have few calories per bite. That may keep you feeling full without filling up your fat cells. Granted, many people bump up the calories by dousing their broccoli or carrots or zucchini in butter, oil, sugar, salad dressing, or cheese. But you can't blame the veggies for that.

2. Vitamins

Most vegetables are packed with vitamins, minerals, and phytochemicals. Some nutrients—like vitamin K and lutein—are hard to find elsewhere. Others—like potassium, iron, folate, calcium, and vitamin C—are in many other foods, but some people still get too little of them.

Granted, some vegetables (like leafy greens) tower over their less-nutritious cousins (like mushrooms and eggplant). But even the less-stellar vegetables have some nutrients going for them.

3. Heart Disease

People who eat more vegetables have a lower risk of heart disease. In a study that tracked roughly 84,000 women and

42,000 men for eight years, those who averaged five or six servings of vegetables a day had an 18 percent lower risk of heart disease than those who typically ate only one or two servings a day.¹

Maybe that's because healthier people eat more vegetables. But it's also possible that potassium, carotenoids, or something else in kale or spinach or other veggies makes a difference.

4. Stroke

In a meta-analysis of eight studies that tracked more than 235,000 men and women for an average of 13 years, those who ate more than five servings of vegetables a day had a 7 percent lower risk of stroke than those who ate less than three servings.²

That's not surprising, since high blood pressure is the strongest risk factor for stroke, and a healthy diet rich in vegetables (as well as fruits and low-fat dairy) lowered blood pressure in the Dietary Approaches to Stop Hypertension (DASH) study.³

Whether it's the potassium or other nutrients in veggies that matters is unclear.

5. Cancer

In recent years, the evidence that vegetables can lower the risk of cancer has lost traction. For example, in a study that examined the diets of nearly 72,000 female nurses and nearly 38,000 male health professionals for 12 years, those who ate more vegetables were less likely to be diagnosed with heart disease, but not cancer.⁴

There is some—albeit inconsistent—evidence that tomatoes, a lycopene-rich vegetable, may protect against prostate cancer, and far less evidence (mostly from test-tube studies) that the sulforaphane in broccoli and other cruciferous vegetables may keep breast and colon cancer at bay. Vegetables may also lower the risk of stomach cancer (which is uncommon in the United States), esophageal cancer (only the kind that's common in heavy drinkers), and cancers of the mouth, pharynx, and larynx (chiefly in smokers).

Just don't expect veggies to be a general cancer shield.

6. Potassium

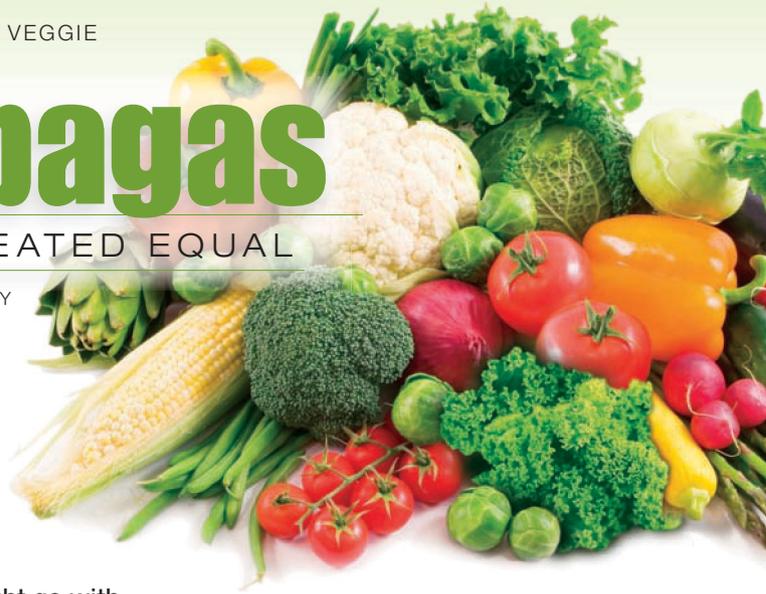
Potassium helps lower blood pressure and the risk of stroke. It may also boost bone density.

It isn't easy to reach the latest daily target for potassium, which was recently ratcheted up to 4,700 milligrams. Only a handful of vegetables—like broccoli, spinach, Swiss chard, potatoes, and sweet potatoes—have even roughly 10 percent of a day's worth. But that's also true for fruit, milk, yogurt, whole grains, chicken, fish, and other sources. The much-praised banana, for example, has just 10 percent.

7. Lutein

If it's green, odds are it has lutein. Lutein and its cousin zeaxanthin are the key carotenoids in the lens of the eye. And people who consume more lutein-rich foods have a lower risk of cataracts in many studies, though it would take more evidence to determine whether lutein was responsible.⁵

The retina is also rich in lutein, leading some researchers to suspect that the pigment can curb the risk of macular degeneration, which is the most common



cause of blindness in older people. A large trial, the Age-Related Eye Disease Study 2 (AREDS2), is now testing lutein supplements (along with vitamins and fish oil) on macular degeneration.

8. Vitamin K

Green leafy vegetables—like kale, spinach, and collards—are the places to get vitamin K, which is best known for its role in blood clotting. (That's why people who take Coumadin or other blood thinners have to keep their vitamin K intake stable.)

In recent years, researchers had suspected that vitamin K could also boost bone density. But several trials have come up empty.⁶ One did have an unexpected result, however. Men (but not women) who were given vitamin K (500 micrograms a day) were less likely to become insulin-resistant over three years.⁷ But it would take more research to know if vitamin K can keep the body sensitive to insulin and fend off diabetes.

9. Pesticides

Okay, pesticides aren't a reason to eat vegetables...but they're no reason to avoid them either.

You could try to sidestep all pesticides by going organic. Or you could just buy organic for vegetables that are most likely to have pesticides. According to data from the Environmental Working Group (foodnews.org), those include sweet bell peppers, celery, spinach, lettuce, and potatoes. Among the cleanest: onions, avocado, frozen sweet corn, asparagus, frozen sweet peas, cabbage, and broccoli. (See *Nutrition Action*, Jul./Aug. 2007, p. 5.)

10. Taste

Vegetables got a bad rap somewhere in the middle of the 20th century. Maybe it was those canned peas-and-carrots mixtures or that overcooked asparagus. Or perhaps it was those side salads—chunks of wilted iceberg lettuce plus a wedge or two of pulpy tomato smothered in Day-Glo orange French or pink Thousand Island.

Back then, few people thought about crisp steamed asparagus drizzled with vinaigrette, sweet potatoes baked so long that they taste like candy, carrot and ginger soup, or grilled portobellos. Those aren't dishes you eat only because you should. 🥬

¹ *Ann. Intern. Med.* 134: 1106, 2001.

² *Lancet* 367: 320, 2006.

³ *N. Engl. J. Med.* 336: 1117, 1997.

⁴ *J. Natl. Cancer Inst.* 96: 1577, 2004.

⁵ *Arch. Ophthalmol.* 126: 354, 2008.

⁶ *J. Clin. Endocrin. Metab.* 93: 1217, 2008.

⁷ *Diabetes Care* 31: 2092, 2008.

RANKINGS

Superstars

(Score = 150+)



Kale, spinach, collards, and other leafy greens are in a class of their own. But broccoli, carrots, sweet potatoes, bell peppers, and most salad greens are also top-notch. They get such high scores largely because they're rich in lutein and beta-carotene, which is visible in their green or orange color. But leafy greens also supply vitamin K and some of just about everything else (calcium, fiber, folate, iron, and vitamin C).

Not Exactly Chopped Liver

(Score = 50-149)



The midrange group typically gets points from vitamin C, vitamin K, lutein, and beta-carotene. But you can also get a nice dose of fiber from artichokes, avocado, green beans, and lima beans. And asparagus, cauliflower, celery, and okra pour on the folate.

Love 'em Anyway

(Score = 0-49)



Okay, so they're not brimming with vitamins. But there's some preliminary evidence that allium vegetables like onions and garlic may lower cancer risk. And who knows? Maybe radishes or mushrooms or cucumbers harbor some undiscovered phytochemical that can prevent or cure Alzheimer's or arthritis or wrinkles. Bottom line: as long as they taste so good, who cares?

The Okra Show

We calculated a score for each vegetable by adding up its percentage of: (1) the Dietary Reference Intake (DRI) for six nutrients, (2) the Daily Value (DV) for fiber, and (3) the daily targets that we've devised for lutein and carotenoids other than lutein. For example, half a cup of cooked broccoli has 31 percent of our target for lutein and 26 percent of our target for other carotenoids, 11 percent of the DV for fiber, plus 100 percent of the DRI for vitamin K, 61 percent for vitamin C, 23 percent for folate (folic acid), 5 percent for potassium, and 3 percent each for calcium and iron. That gives it a score of 263 points.

Calcium, iron, and folate were part of the score but don't appear in our chart. Ditto for carotenoids other than lutein, which include alpha-carotene, beta-carotene, and lycopene. We included lutein in the chart because of growing evidence that it may help prevent cataracts. There is no DRI for lutein, so we set our own (3,000 micrograms) by examining studies on cataracts. (The DRIs—daily targets set by the Institute of Medicine—vary slightly by age and gender. We picked the highest level for adults, excluding pregnant and lactating women.)

KEY

- Contains 100% or more of the Dietary Reference Intake (DRI)
- Contains 20%-99% of the DRI
- ⊕ Contains 10%-19% of the DRI
- ⊕ Contains 5%-9% of the DRI
- ⊕ Contains less than 5% of the DRI

Dietary Reference Intakes (DRIs)

Calcium: 1,200 mg	Iron: 18 mg	Potassium: 4,700 mg
Fiber: 25 g ¹	Lutein: 3,000 mcg ²	Vitamin C: 90 mg
Folate: 400 mcg	Other carotenoids: 3,000 mcg ²	Vitamin K: 120 mcg

¹ Daily Value. ² *Nutrition Action* figure based on available research.

Source: U.S. Department of Agriculture Nutrient Data Laboratory (www.ars.usda.gov/ba/bhnrc/ndl).

VEGETABLES

(3 oz. — ½ cup — cooked, unless noted)

Superstars (Score = 150+)	Score	Calories	Vitamin K	Lutein	Vitamin C	Potassium	Fiber
Kale (⅔ cup)	1,389	20	⊕	⊕	⊕	⊕	⊕
Spinach	931	20	⊕	⊕	⊕	⊕	⊕
Collard greens	733	20	⊕	⊕	⊕	⊕	⊕
Turnip greens (⅔ cup)	709	20	⊕	⊕	⊕	⊕	⊕
Swiss chard	700	20	⊕	⊕	⊕	⊕	⊕
Spinach, raw (2 cups)	672	10	⊕	⊕	⊕	⊕	⊕
Pumpkin, canned	570	40	⊕	⊕	⊕	⊕	⊕
Mustard greens (⅔ cup)	547	10	⊕	⊕	⊕	⊕	⊕
Sweet potato, with skin (1 medium)	485	100	⊕	⊕	⊕	⊕	⊕
Radicchio, raw (2 cups)	464	20	⊕	⊕	⊕	⊕	⊕
Broccoli, raw (5 spears)	420	50	⊕	⊕	⊕	⊕	⊕
Carrots	397	30	⊕	⊕	⊕	⊕	⊕
Romaine lettuce, raw (2 cups)	394	20	⊕	⊕	⊕	⊕	⊕
Broccoli rabe (7 stalks)	386	30	⊕	⊕	⊕	⊕	⊕
Carrots, raw (1 large)	348	30	⊕	⊕	⊕	⊕	⊕
Red bell pepper, raw (1 large)	340	50	⊕	⊕	⊕	⊕	⊕
Curly endive, raw (2 cups)	307	20	⊕	⊕	⊕	⊕	⊕
Parsley, raw (¼ cup)	297	10	⊕	⊕	⊕	⊕	⊕
Green leaf lettuce, raw (2 cups)	286	10	⊕	⊕	⊕	⊕	⊕
Sun-dried tomato (¼ cup)	281	40	⊕	⊕	⊕	⊕	⊕
Broccoli	263	30	⊕	⊕	⊕	⊕	⊕
Boston or bibb lettuce, raw (2 cups)	257	10	⊕	⊕	⊕	⊕	⊕
Brussels sprouts	243	30	⊕	⊕	⊕	⊕	⊕
Red bell pepper	223	20	⊕	⊕	⊕	⊕	⊕
Tomato, raw (1 medium)	214	30	⊕	⊕	⊕	⊕	⊕
Red leaf lettuce, raw (2 cups)	198	10	⊕	⊕	⊕	⊕	⊕
Butternut squash	197	30	⊕	⊕	⊕	⊕	⊕
Green bell pepper, raw (1 large)	193	30	⊕	⊕	⊕	⊕	⊕
Peas	166	70	⊕	⊕	⊕	⊕	⊕
Bok choy	152	10	⊕	⊕	⊕	⊕	⊕

Not Exactly Chopped Liver (Score = 50-149)	Score	Calories	Vitamin K	Lutein	Vitamin C	Potassium	Fiber
Tomato	134	20	⊕	⊕	⊕	⊕	⊕
Arugula, raw (2 cups)	133	10	⊕	⊕	⊕	⊕	⊕
Snow peas	133	30	⊕	⊕	⊕	⊕	⊕
Savoy cabbage, raw (1 cup)	132	20	⊕	⊕	⊕	⊕	⊕
Asparagus (6 spears)	131	20	⊕	⊕	⊕	⊕	⊕
Red cabbage, raw (1 cup)	131	30	⊕	⊕	⊕	⊕	⊕
Pumpkin	117	20	⊕	⊕	⊕	⊕	⊕
Cabbage, raw (1 cup)	116	20	⊕	⊕	⊕	⊕	⊕
Zucchini, raw (½ medium)	115	20	⊕	⊕	⊕	⊕	⊕
Green bell pepper	111	20	⊕	⊕	⊕	⊕	⊕
Cauliflower, raw (1 cup)	100	30	⊕	⊕	⊕	⊕	⊕

Score	Calories	Vitamin K	Lutein	Vitamin C	Potassium	Fiber
Red cabbage	92	30	⊕	⊕	⊕	⊕
Artichoke (½)	89	50	⊕	⊕	⊕	⊕
Scallions, raw (¼ cup)	89	10	⊕	⊕	⊕	⊕
Iceberg lettuce, raw (2 cups)	88	20	⊕	⊕	⊕	⊕
Okra	85	20	⊕	⊕	⊕	⊕
Celery, raw (2 large stalks)	79	20	⊕	⊕	⊕	⊕
Green beans (⅔ cup)	79	30	⊕	⊕	⊕	⊕
Leeks (¾ cup)	79	30	⊕	⊕	⊕	⊕
Cauliflower	75	20	⊕	⊕	⊕	⊕
Cilantro, raw (2½ Tbs.)	75	5	⊕	⊕	⊕	⊕
Wax beans (⅔ cup)	75	30	⊕	⊕	⊕	⊕
Zucchini	74	10	⊕	⊕	⊕	⊕
Avocado, raw (½)	73	120	⊕	⊕	⊕	⊕
Kohlrabi	68	30	⊕	⊕	⊕	⊕
Lima Beans	65	100	⊕	⊕	⊕	⊕
Green chili pepper, raw (½)	53	10	⊕	⊕	⊕	⊕
Potato, with skin (1 medium)	53	100	⊕	⊕	⊕	⊕

Love 'em Anyway (Score = 0-49)	Score	Calories	Vitamin K	Lutein	Vitamin C	Potassium	Fiber
Parsnips	49	60	⊕	⊕	⊕	⊕	⊕
Corn	47	70	⊕	⊕	⊕	⊕	⊕
Jicama, raw	45	30	⊕	⊕	⊕	⊕	⊕
Rutabaga	39	30	⊕	⊕	⊕	⊕	⊕
Beets	38	40	⊕	⊕	⊕	⊕	⊕
Jerusalem artichoke (sunchoke), raw	37	60	⊕	⊕	⊕	⊕	⊕
Red chili pepper, raw (½)	36	10	⊕	⊕	⊕	⊕	⊕
Yellow squash	35	20	⊕	⊕	⊕	⊕	⊕
Radishes, raw (9 large)	34	10	⊕	⊕	⊕	⊕	⊕
Beets, canned	32	40	⊕	⊕	⊕	⊕	⊕
Cucumber, raw, with peel (⅓ medium)	29	20	⊕	⊕	⊕	⊕	⊕
Water chestnuts, canned	27	70	⊕	⊕	⊕	⊕	⊕
Turnips	26	20	⊕	⊕	⊕	⊕	⊕
Portobello mushrooms (¾ cup)	24	30	⊕	⊕	⊕	⊕	⊕
Cucumber, raw, peeled (⅓ medium)	23	10	⊕	⊕	⊕	⊕	⊕
Sauerkraut, canned (2 Tbs.)	21	10	⊕	⊕	⊕	⊕	⊕
Eggplant (¾ cup)	19	30	⊕	⊕	⊕	⊕	⊕
Onion	19	40	⊕	⊕	⊕	⊕	⊕
White mushrooms (¾ cup)	19	20	⊕	⊕	⊕	⊕	⊕
Alfalfa sprouts, raw (½ cup)	18	10	⊕	⊕	⊕	⊕	⊕
Jalapeño pepper, raw (1)	18	10	⊕	⊕	⊕	⊕	⊕
Spaghetti squash	18	20	⊕	⊕	⊕	⊕	⊕
White mushrooms, raw (5 medium)	17	20	⊕	⊕	⊕	⊕	⊕
Bamboo shoots, canned	10	20	⊕	⊕	⊕	⊕	⊕
Onion, raw (3 Tbs.)	8	10	⊕	⊕	⊕	⊕	⊕
Garlic, raw (1 clove)	3	10	⊕	⊕	⊕	⊕	⊕