



Eat the Rainbow



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While flipping through cookbooks or scrolling through social media, you're likely to find an abundance of images featuring vibrant fruits and vegetables. Seeing colorful plates of food makes people excited, interested, and appetized. In addition to looking beautiful, colorful produce is an indicator of nutrient density, too!

PHYTONUTRIENT POWER

Colorful plant-based foods contain large amounts of fiber, vitamins, and minerals. They're also full of phytonutrients – natural compounds that protect plants from bugs, germs, fungi, and other threats. But phytonutrients aren't just good for plants – they help keep people healthy, too! Eating phytonutrients affects cellular structure and function and can help prevent disease and keep your body functioning at its best.¹

Though including fruits and vegetables is a well-known feature of a healthy diet, studies show most people eat less than the recommended amounts.² When our plates are full of white (often depleted of nutrients), brown (often overcooked or fried), or yellow (often high in processed carbohydrates) foods, it may be a sign we're lacking the phytonutrient power our body needs to nourish or heal itself.

Here are some phytonutrients to try to include regularly in your diet:

Phytonutrient	Benefits	Food Sources
Carotenoids (alpha-carotene, beta-carotene, beta-cryptoxanthin, lutein, lycopene)	Act as antioxidants, protecting cells from damage by molecules known as free radicals	Yellow, orange, and red fruits and vegetables, such as butternut squash, carrots, pumpkins, red peppers, tomatoes, and watermelon
Ellagic acid	Provides protection from cancer and has anti-inflammatory benefits	Cranberries, grapes, guava, pomegranates, raspberries, walnuts, and strawberries
Glucosinates ³	Help limit cancer growth	Cruciferous vegetables, such as broccoli, brussels sprouts, cabbage, and kale
Polyphenols ⁴ (flavonoids, phenolic acids, polyphenolic amides)	Help reduce the risk of chronic disease	Apples, chili peppers, onions, red cabbage, and turmeric
Resveratrol	Provides antioxidant and anti-inflammatory benefits; may reduce the risk of heart disease and some cancers	Grapes and wine

BENEFITS OF EATING THE RAINBOW

Eating the rainbow, or choosing a variety of brightly colored plant foods, can be beneficial in many ways.

- **Reduced chronic disease risk** – Many of the phytonutrients in fruits and vegetables have anti-inflammatory and/or epigenetic benefits⁵ and therefore are associated with a decreased risk of chronic diseases, including diabetes, cardiovascular disease, cancer, dementia, weight-related issues, and more.⁶
- **Gut-health maintenance** – The polyphenols found in many fruits and vegetables contribute to a healthy gut by beneficially modulating the gut-microbial balance.⁷ A healthy gut is key to immune system function.
- **Improved variety in the diet** – Eating the rainbow can be an easy way to add more variety to your diet, which keeps meals interesting and encourages you to try new foods.
- **Increased nutrient intake** – While eating more vegetables and fruits is always a good idea, eating a variety of colors will increase your intake of key nutrients to benefit different areas of your health. Each color carries a unique set of disease-fighting compounds. Giving your body an array of vitamins, minerals, and phytochemicals means you'll fill any potential nutritional gaps that may be keeping you from feeling – and healing – your best!
- **Reduced psychological distress and improved psychological well-being** – One study found those who ate a variety of fruits and vegetables for 13 consecutive days enjoyed an increase in curiosity, happiness, creativity, and greater flourishing in daily life.⁸ Improved ability to perform cognitive tasks has also been associated with eating the rainbow.

PUT IT INTO PRACTICE

Filling your plate with colorful plant-based foods isn't about avoiding other essential nutrients, like carbohydrates, fats, or protein; it's about ensuring you're getting the diversity of phytonutrients needed to support your well-being.

Try these tips for brightening the color palette of your plate:

- **Establish a baseline number of colors.**

Gradually increase your consumption by working up to incorporating at least two or three different colored fruits and vegetables at each meal and at least one at every snack. Remember, combining small amounts of several colors at a time may be more impactful than eating a pint of blueberries every day.

- **Start small and make changes that are manageable and sustainable.**

Work toward crowding out other food options by filling your plate with a rainbow of plant-based foods first. While you don't have to eat every color every day, try to get a variety of colors into your diet each week.

- **Switch things up.**

Swap orange carrots with purple and white varieties or eat purple cauliflower instead of the common white variety to provide a better diversity of phytonutrients. You may also choose to switch up the way you prepare your fruits and vegetables. Some cooking methods may affect phytonutrient composition. For example, beta-carotene absorption is higher in cooked versus raw carrots.⁹

- **Don't go at it alone!**

Trying new foods may bring up feelings of fear or excitement. Ask questions in the produce aisle at the grocery store, bodega, or wherever you buy your food if you need guidance on where and how to find a new fruit or vegetable. Research the best seasons and ways to buy unfamiliar produce. Try visiting a local farmers' market, where you can discuss fruits and veggies that are new

to you with the farmers who grow and sell them. Sign up for a community-supported agriculture (CSA) to learn about new produce and support local farmers. Seek out new recipes that will not only guide your efforts to add the rainbow to your plate but make them delicious, too!

- **Get inspired.**

Use the Shop the Rainbow chart and the grocery list on the last few pages to inspire your search for recipes and food-prep plans and choose colorful fruits and vegetables in the produce aisle.

There are numerous benefits to eating a diversity of plant-based foods. Because dietary intake levels continue to fall well below recommended amounts, it may be helpful to develop intentional strategies to consume more of these foods. Emphasizing eating the rainbow offers an easy, accessible approach to include a large quantity and diversity of phytonutrients in the diet.

FOOTNOTES

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SHOP THE RAINBOW

Use this chart and grocery list while shopping to help bring the incredible diversity of fruits and vegetables home to your plate! (You can also save pictures of them on your phone so they're with you whenever you need them.)

Red

Beneficial Compounds and Phytonutrients: Anthocyanins; antioxidants; lycopene

Body Benefits: Improved inflammation, immune, and stress response; lower risks of certain kinds of cancers and heart disease; improved brain function

Vegetables: African eggplant, beets, radishes, red onion, red peppers, tomatoes

Fruits: Blood oranges, cherries, cranberries, dragon fruit, lychee, plums, pomegranates, prickly pears, rambutan, raspberries, rhubarb, strawberries, tamarillo, watermelon

Orange

Beneficial Compounds and Phytonutrients: Beta-carotene; bioflavonoids; carotenoids

Body Benefits: Hormone regulation; reproductive, skin, hair, and vision health

Vegetables: African horned cucumber, carrots, orange peppers, pumpkins, sweet potatoes, tomatoes, winter squash

Fruits: Apricots, cantaloupe, cape gooseberries, lulo, mango, nectarine, oranges, papaya, persimmons, tamarind, tangerines

Yellow

Beneficial Compounds and Phytonutrients: Acids; enzymes; fibers; prebiotics; probiotics

Body Benefits: Digestive health; metabolism

Vegetables: Fermented cabbage, garlic, ginger, parsnips, rutabagas, summer squash, sweet corn, turmeric, winter squash, yellow beets, yellow peppers, yellow potatoes

Fruits: Asian pears, bananas, cashew fruit, cherimoya, golden kiwifruit, grapefruit, jackfruit, lemons, nísperos, passionfruit, peaches, pepino dulce, pineapples, plantains, pomelo, quince, starfruit, yellow apples, yellow watermelon

Green

Beneficial Compounds and Phytonutrients: Chlorophyll; folate; magnesium; nitrates; vitamin K

Body Benefits: Heart health; circulation

Vegetables: Artichokes, arugula, asparagus, bok choy, broccoli, broccoli rabe, brussels sprouts, celery, chayote squash, Chinese cabbage, collard greens, cucumbers, endive, green beans, green onions, green peppers, jute mallow, kale, leeks, lettuce, lovage, microgreens, mustard greens, okra, peas, sea vegetables, snow peas, spinach, turnip greens, watercress, zucchini

Fruits: Avocado, green apple, green grapes, honeydew, kiwifruit, limes

Blue/Purple

Beneficial Compounds and Phytonutrients: Flavonoids; proanthocyanidins

Body Benefits: Brain health; mood support

Vegetables: Black olives, black salsify, eggplant, potatoes, purple asparagus, purple Belgian endive, purple cabbage, purple carrots, purple cauliflower, purple peppers

Fruits: Açai, black currants, blackberries, blueberries, concord grapes, dried plums, elderberries, grape juice (100%), mangosteen, plums, purple figs, purple grapes, raisins

SHOP THE RAINBOW GROCERY LIST

 **Red**

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 **Orange**

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 **Yellow**

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 **Green**

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 **Blue/Purple**

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