



Antioxidants

Fight Aging with Food!

What are antioxidants?

- ≈ **Antioxidants** are substances that stabilize free radicals
- ≈ **Free radicals** are chemicals produced by pollution, UV light, radiation, and toxic substances and cause damage to cells in the body

Diseases linked to free radicals:

- Cancer
- Heart disease (also referred to as cardiovascular disease)
- Type 2 diabetes
- Arthritis and rheumatoid arthritis
- Cataracts
- Alzheimer's disease
- Parkinson's disease
- Urinary tract infections (also referred to as UTIs)
- Lowered immune response to infection

Antioxidants primarily come from vitamins, minerals, and phytochemicals

Vitamins

- **Vitamin A** (retinol): liver, fortified milk, eggs, butter, and cheese
- **Beta-carotene** (vitamin A precursor, considered a phytonutrient): carrots, sweet potatoes, pumpkin, spinach, apricots, broccoli, kale, and cantaloupe
- **Vitamin C** (ascorbic acid): bell peppers, strawberries, citrus fruits, kiwi, pineapple, sweet potatoes, and broccoli
- **Vitamin E** (tocopherol): vegetable oils, nuts, seeds, soybeans, avocado and wheat germ

Minerals

- **Selenium:** organ meats, tuna, pork, seafood, fish, ricotta cheese, couscous, whole wheat spaghetti, and nuts
- **Zinc:** beef, crab, fortified breakfast cereals, pork, cashews, lobster, and baked beans

Phytochemicals (also referred to as phytonutrients)

- **Lycopene:** tomatoes/tomato products, red peppers, watermelon
- **Organosulfur compounds:** onions, leeks, shallots, and garlic
- **Lutein:** spinach, broccoli, artichokes, Brussels sprouts



Top 3 Phytochemical Groups

Phytochemical(s)	Colors	Food source	Potential Health Benefits
<i>Carotenoids:</i>			
Beta-carotene	Yellow/Orange & Dark Green	Pumpkin, sweet potatoes, carrots, spinach, broccoli, kale	Immune system, vision, skin health, bone health
Lycopene	Red	Watermelon, tomatoes/tomato products, red peppers	May help prevent prostate cancer, promotes heart health
Lutein	Green	Brussels sprouts, lettuces, broccoli, spinach	Eye health, heart health, may prevent certain cancers
Zeaxanthin	Green & Yellow/Orange	Spinach, kale, corn, nectarines, tangerines	May help prevent macular degeneration
<i>Flavonoids:</i>			
Anthocyanidins	Blue/Purple & Red	Blueberries, plums, red potatoes, blackberries, cranberries, raspberries, red onions, strawberries	Blood vessel health, may inhibit inflammation and tumor growth
Proanthocyanidins Flavan-3-ols	Blue/Purple & Red	Berries, grapes/juice, cocoa, tea, red wine, dark chocolate cranberries/juice	May reduce the risk of heart disease and cancer, may protect against UTIs
Flavones	Green & Red	Celery, lettuce, parsley, Brussels sprouts, cabbage, spinach, beets, cauliflower	May have anti-inflammatory and anti-cancer effects
Flavanones	White, Red & Yellow/Orange	Citrus fruits and juices	May help lower blood pressure, inflammation, and cholesterol
Flavonols	Blue/Purple, Green, White, Yellow/Orange & Red	Berries, spinach, onions, apples, cranberries, grapes, broccoli	May have anti-inflammatory and anti-cancer effects
<i>Other Groups:</i>			
Resveratrol	Red & Blue/Purple	Grape skin, grape juice, red wine	May have anti-inflammatory effects
Indoles & Isothiocyanates	White & Green	Broccoli, kale, cauliflower, cabbage	May protect against cancer
Organosulfur compounds	White & Green	Chives, leeks, garlic, onions/shallots	
Ellagic Acid	Red & Blue/Purple	Berries	

Note: This is not an exhaustive list of antioxidants and this information not intended to replace medical advice pertaining to your health or disease management or prevention. Resource: *Produce for Better Health Foundation*

Veggies



ARTICHOKE



How to Select

Choose plump artichoke heads with tightly closed leaves, heavy for size. Pull back one leaf to check heart for black blemishes. During winter, white, blistered or bronze appearance does not affect quality.

How to Store

Refrigerate artichokes in plastic bag up to one week. Keep dry to prevent mold growth.

Serving Size 1 artichoke (56g edible portion)	
Amount Per Serving	
Calories 25	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 70mg	3%
Total Carbohydrate 6g	2%
Dietary Fiber 3g	12%
Sugars 1g	
Protein 2g	
Vitamin A 2%	Vitamin C 10%
Calcium 2%	Iron 2%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower	

CAULIFLOWER



How to Select

Choose cauliflower with compact, creamy white curds and bright green, firmly attached leaves. Avoid brown spots or loose sections that are spread out.

How to Store

Refrigerate cauliflower in plastic bag up to 5 days.

Serving Size 1/6 medium head (99g)	
Amount Per Serving	
Calories 25	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 30mg	1%
Total Carbohydrate 5g	2%
Dietary Fiber 2g	8%
Sugars 2g	
Protein 2g	
Vitamin A 0%	Vitamin C 100%
Calcium 2%	Iron 2%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	

ASPARAGUS



How to Select

Choose odorless asparagus stalks with dry, tight tips. Avoid limp or wilted stalks.

How to Store

Refrigerate asparagus for up to four days by wrapping ends of stalks in wet paper towel and placing in plastic bag.

Serving Size 5 spears (93g)	
Amount Per Serving	
Calories 20	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 4g	1%
Dietary Fiber 2g	8%
Sugars 2g	
Protein 2g	
Vitamin A 10%	Vitamin C 15%
Calcium 2%	Iron 2%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower	

CELERY



How to Select

Choose straight, rigid celery stalks with fresh leaves. Avoid pithy, woody or limp stalks. Should smell fresh, not musty.

How to Store

Refrigerate celery in a plastic bag for a week or more.

Serving Size 2 medium stalks (110g)	
Amount Per Serving	
Calories 15	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 115mg	5%
Total Carbohydrate 4g	1%
Dietary Fiber 2g	8%
Sugars 2g	
Protein 0g	
Vitamin A 10%	Vitamin C 15%
Calcium 4%	Iron 2%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	

BELL PEPPER



How to Select

Choose firm, brightly colored peppers with tight skin that are heavy for their size. Avoid dull, shriveled or pitted peppers.

How to Store

Refrigerate bell peppers in plastic bag for use within 5 days.

Serving Size 1 medium pepper (148g)	
Amount Per Serving	
Calories 25	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 40mg	2%
Total Carbohydrate 6g	2%
Dietary Fiber 2g	8%
Sugars 4g	
Protein 1g	
Vitamin A 4%	Vitamin C 190%
Calcium 2%	Iron 4%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	

COLLARD GREENS



How to Select

Choose bunches with dark green leaves with no yellowing.

How to Store

Refrigerate collard greens in a plastic bag for up to 5 days.

Serving Size 2 cups chopped (72g)	
Servings Per Container	
Amount Per Serving	
Calories 20	Calories from Fat 5
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 15mg	1%
Total Carbohydrate 4g	1%
Dietary Fiber 3g	12%
Sugars 0g	
Protein 2g	

BROCCOLI



How to Select

Choose odorless broccoli heads with tight, bluish-green florets.

How to Store

Refrigerate broccoli and use within 3-5 days.

Serving Size 1 medium stalk (148g)	
Amount Per Serving	
Calories 45	Calories from Fat 0
% Daily Value*	
Total Fat 0.5g	1%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 80mg	3%
Total Carbohydrate 8g	3%
Dietary Fiber 3g	12%
Sugars 2g	
Protein 4g	
Vitamin A 6%	Vitamin C 220%
Calcium 6%	Iron 6%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	

CUCUMBER



How to Select

Choose firm, well shaped cucumbers with dark green color, heavy for size.

How to Store

Refrigerate cucumbers in plastic bag up to 1 week.

Serving Size 1/3 medium (99g)	
Amount Per Serving	
Calories 10	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 2g	1%
Dietary Fiber 1g	4%
Sugars 1g	
Protein 1g	
Vitamin A 4%	Vitamin C 10%
Calcium 2%	Iron 2%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	

BRUSSELS SPROUTS



How to Select

Choose firm, compact, bright green brussels sprouts heads. Buy on stalk when possible.

How to Store

Refrigerate brussels sprouts in plastic bag up to 1 week.

Serving Size 4 sprouts (84g)	
Amount Per Serving	
Calories 40	Calories from Fat 5
% Daily Value*	
Total Fat 0.5g	1%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 25mg	1%
Total Carbohydrate 6g	2%
Dietary Fiber 3g	12%
Sugars 2g	
Protein 2g	
Vitamin A 8%	Vitamin C 120%
Calcium 2%	Iron 0%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	

GREEN BEANS



How to Select

Choose fresh, well colored beans that snap easily when bent.

How to Store

Refrigerate green beans in plastic bag, use within 1 week.

Serving Size 3/4 cup cut beans (83g)	
Amount Per Serving	
Calories 20	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 5g	2%
Dietary Fiber 3g	12%
Sugars 2g	
Protein 1g	
Vitamin A 4%	Vitamin C 10%
Calcium 4%	Iron 2%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	

CARROT



How to Select

Choose well-shaped, smooth, firm, crisp carrots with deep color and fresh, green tops. Avoid soft, wilted or split carrots.

How to Store

Refrigerate carrots in plastic bag with tops removed up to 2 weeks.

Serving Size 7" long, 1 1/4" diam. (78g)	
Amount Per Serving	
Calories 30	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 60mg	3%
Total Carbohydrate 7g	2%
Dietary Fiber 2g	8%
Sugars 5g	
Protein 1g	
Vitamin A 110%	Vitamin C 10%
Calcium 2%	Iron 2%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	

GREEN CABBAGE



How to Select


Choose green cabbage heads with compact leaves that are heavy for their size.

How to Store

Refrigerate green cabbage for up to 7 days.

Serving Size 1/12 medium head (84g)	
Amount Per Serving	
Calories 25	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 20mg	1%
Total Carbohydrate 5g	2%
Dietary Fiber 2g	8%
Sugars 3g	
Protein 1g	
Vitamin A 0%	Vitamin C 70%
Calcium 4%	Iron 2%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	

GREEN ONION



How to Select

Choose stalks with fresh, green tops and slightly white ends.

How to Store


Refrigerate green onions in plastic bag for use as soon as possible.

Serving Size 1/4 cup chopped (25g)

Amount Per Serving	
Calories 10	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 10mg	0%
Total Carbohydrate 2g	1%
Dietary Fiber 1g	4%
Sugars 1g	
Protein 0g	
Vitamin A 2%	Vitamin C 8%
Calcium 2%	Iron 2%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

RHUBARB



How to Select

Choose flat stalks that are not curled or limp. Deep red stalks are sweeter and richer; tenderness is not related to size.

How to Store


Refrigerate rhubarb in a plastic bag; use within a few days.

Serving Size 1/2 cup (61g)

Servings Per Container

Amount Per Serving	
Calories 15	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 3g	1%
Dietary Fiber 1g	4%
Sugars 1g	
Protein 1g	

ICEBERG LETTUCE



How to Select

Choose plump heads, ready for their size, with tightly closed leaves. Pull back one leaf to check heart for any black blemishes. During winter, white blistered or bronze appearance does not affect quality.

How to Store


Refrigerate in plastic bag up to one week. Keep dry to prevent mold growth.

Serving Size 1/6 medium head (89g)

Amount Per Serving	
Calories 10	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 10mg	0%
Total Carbohydrate 2g	1%
Dietary Fiber 1g	4%
Sugars 2g	
Protein 1g	
Vitamin A 6%	Vitamin C 6%
Calcium 2%	Iron 2%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

ROMAINE LETTUCE



How to Select

Choose closely bunched, fresh-looking leaves. Avoid brown, wilting edges.

How to Store


Rinse and dry romaine lettuce thoroughly on paper towels. Refrigerate in plastic bag for use within 1 week.

Serving Size 6 leaves (85g)

Amount Per Serving	
Calories 20	Calories from Fat 0
% Daily Value*	
Total Fat 0.5g	1%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 3g	1%
Dietary Fiber 1g	4%
Sugars 2g	
Protein 1g	
Vitamin A 20%	Vitamin C 4%
Calcium 2%	Iron 2%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

LEAF LETTUCE



How to Select

Choose lettuce with crisp leaves. Avoid brown edges.

How to Store

After purchase, rinse well and dry with paper towels. Refrigerate leaf lettuce in plastic bag up to 1 week.

Serving Size 1½ cups shredded (85g)

Amount Per Serving	
Calories 15	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 35mg	1%
Total Carbohydrate 2g	1%
Dietary Fiber 1g	4%
Sugars 1g	
Protein 1g	
Vitamin A 130%	Vitamin C 6%
Calcium 2%	Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

SPINACH



How to Select

Choose fresh, crisp, green bunches with no evidence of insect damage.

How to Store


Loosely wrap spinach in damp paper towel. Refrigerate in plastic bag for use within 3-5 days.

Serving Size 1½ cups shredded (86g)

Amount Per Serving	
Calories 40	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 10g	3%
Dietary Fiber 5g	20%
Sugars 0g	
Protein 2g	
Vitamin A 70%	Vitamin C 25%
Calcium 6%	Iron 20%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

MUSHROOMS



How to Select

Choose well shaped mushrooms with firm texture. Avoid spots and slime.

How to Store

Refrigerate mushrooms in original container or paper bag up to 1 week.

Serving Size 5 medium mushrooms (84g)

Amount Per Serving	
Calories 20	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 15mg	0%
Total Carbohydrate 3g	1%
Dietary Fiber 1g	4%
Sugars 0g	
Protein 3g	
Vitamin A 0%	Vitamin C 2%
Calcium 0%	Iron 2%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

SUMMER SQUASH



How to Select

For all squash varieties, choose glossy, small- to medium-sized squash, heavy for size.

How to Store


Refrigerate summer squash for use within 3-4 days.

Serving Size ½ medium squash (98g)

Amount Per Serving	
Calories 20	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 4g	1%
Dietary Fiber 2g	8%
Sugars 2g	
Protein 1g	
Vitamin A 6%	Vitamin C 30%
Calcium 2%	Iron 2%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

ONION



How to Select

Choose onions that are firm and dry with bright, smooth outer skins.

How to Store

Store whole onions in a cool, dark, well ventilated place for use within 4 weeks. Refrigerate cut onions in a tightly sealed container for use within 2-3 days.

Serving Size 1 medium onion (148g)

Amount Per Serving	
Calories 45	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 5mg	0%
Total Carbohydrate 11g	4%
Dietary Fiber 3g	12%
Sugars 9g	
Protein 1g	
Vitamin A 0%	Vitamin C 20%
Calcium 4%	Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

SWEET CORN



How to Select

Choose ears with green husks, fresh silks and tight rows of kernels.

How to Store


Refrigerate corn with husks on for use as soon as possible or within 1-2 days.

Serving Size kernels from 1 medium ear (90g)

Amount Per Serving	
Calories 90	Calories from Fat 20
% Daily Value*	
Total Fat 2.5g	4%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 18g	6%
Dietary Fiber 2g	8%
Sugars 5g	
Protein 4g	
Vitamin A 2%	Vitamin C 10%
Calcium 0%	Iron 2%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

POTATO



How to Select

All potato varieties should be clean, firm, smooth, dry and uniform in size.

How to Store


Store potatoes in a cool, dark, well ventilated place for use within 3-5 weeks.

Serving Size 1 medium (148g)

Amount Per Serving	
Calories 110	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 26g	9%
Dietary Fiber 2g	8%
Sugars 1g	
Protein 3g	
Vitamin A 0%	Vitamin C 45%
Calcium 2%	Iron 6%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

SWEET POTATO



How to Select

Choose firm, small-to medium-sized potatoes with smooth skin. Avoid cracks, soft spots and blemishes.

How to Store


Store sweet potatoes in a cool, dark place for use within 3-5 weeks.

Serving Size 1 medium, 5" long, 2" diam. (130g)

Amount Per Serving	
Calories 100	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 70mg	3%
Total Carbohydrate 23g	8%
Dietary Fiber 4g	16%
Sugars 7g	
Protein 2g	
Vitamin A 120%	Vitamin C 30%
Calcium 4%	Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

RADISHES



How to Select

Choose smooth, brightly colored, medium sized radishes. Attached tops should be green and fresh looking.

How to Store


Refrigerate radishes in plastic bag for use within 1 week. Remove tops before storing.

Serving Size 7 radishes (85g)

Amount Per Serving	
Calories 10	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 55mg	2%
Total Carbohydrate 3g	1%
Dietary Fiber 1g	4%
Sugars 2g	
Protein 0g	
Vitamin A 0%	Vitamin C 30%
Calcium 2%	Iron 2%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

TOMATO



How to Select

Choose tomatoes with bright, shiny skins and firm flesh.

How to Store

Store at room temperature away from direct sunlight, for use within 1 week after ripe. Tomatoes taste best if not refrigerated; refrigerate only if you can't use them before they spoil.

Serving Size 1 medium tomato (148g)

Amount Per Serving	
Calories 25	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 20mg	1%
Total Carbohydrate 5g	2%
Dietary Fiber 1g	4%
Sugars 3g	
Protein 1g	
Vitamin A 20%	Vitamin C 40%
Calcium 2%	Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:



Leafy Greens: Inflammation Fighters!

Is inflammation good or bad? Both! Acute inflammation is a necessary part of healing; it sends white blood cells to the scene when we're injured or ill. Chronic inflammation, however, is unhealthy; it can cause problems in almost every organ in the body and is thought to be a root cause of many chronic conditions from diabetes and arthritis to hay fever and heart disease.

The good news is that eating a wide range of healthy, whole foods can help fight dangerous chronic inflammation. One good inflammation-fighting choice most of us don't get enough of is dark, leafy greens.



Leafy greens like spinach, kale, chard, arugula, endive, turnip greens, beet greens, and collard greens all contain significant concentrations of vitamins and other nutrients that have been found to reduce chronic inflammation. Vitamin A, vitamin D, vitamin E and vitamin K, just to name a few, have all shown, in research, that they can fight inflammation. Many leafy greens also contain alpha-linolenic acid, an omega-3 fat that is known for its anti-inflammatory benefits.

When you're choosing leafy greens, keep these tips in mind:

- ▲ **Choose darker greens.** In general, the darker the color of greens, the more healthy nutrients they contain. Iceberg lettuce is a lightweight compared to spinach and kale, for instance.
- ▲ **Pair greens with olive oil.** Many of the important vitamins in greens can only be absorbed by our bodies in the presence of oil. In one study, researchers found that people eating a salad of spinach, romaine, tomatoes and carrots absorbed plenty of nutrients with a full-fat salad dressing – but only a “negligible” amount when they chose fat-free salad dressing.¹
- ▲ **Enjoy greens both raw and cooked.** While cooking makes some nutrients easier to absorb, heat diminishes or destroys others. So eat some of your greens cooked, and enjoy others in salads.








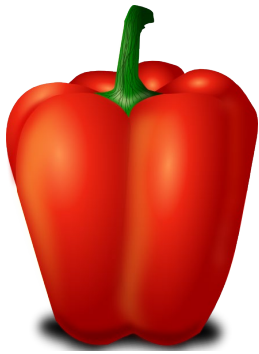
¹American Journal of Clinical Nutrition, Brown et al., 2004 Aug;80(2):396-403



What Color Are Your Fruits and Vegetables?

You've probably heard the old cliché, "Variety is the spice of life." Well, when it comes to food and nutrition, variety helps ensure we get all the nutrients our bodies need for good health. Vegetables and fruits come in a multitude of colors, textures, shapes, and flavors. They provide a variety of vitamins and minerals, as well as fiber. So go ahead: liven up your plate with a range of colors to provide a nutritious meal.

Color	Fruit	Vegetable	
Green produce indicates antioxidant potential and may help promote healthy vision and reduce cancer risk.	Avocados, green apples, green grapes, honeydew melons, kiwi, and lime	Artichoke, asparagus, broccoli, cabbage, green beans, green peppers, okra, and leafy greens, such as kale and spinach	
Orange and deep yellow fruits and vegetables contain nutrients that promote healthy vision and reduce the risk of inflammation and some cancers.	Apricots, cantaloupe, grapefruit, mangoes, oranges, papayas, peaches, pineapples, yellow apples, and yellow figs	Carrots, yellow and orange peppers, yellow corn, sweet potatoes, and winter squash	
Purple and blue options may have antioxidant and anti-aging benefits and may help with memory, urinary tract health, and reduced cancer risk.	Blackberries, blueberries, plums, purple figs, Concord grapes and raisins	Eggplant, purple cabbage, purple-fleshed potatoes	
Red indicates produce that may help maintain a healthy heart and memory, and may reduce cancer risk.	Cherries, cranberries, pomegranate, red/pink grapefruit, red grapes, and watermelon	Beets, red onions, red peppers, red potatoes, rhubarb, and tomatoes	
White, tan, and brown foods sometimes contain nutrients that may promote heart health and reduce cancer risk.	Bananas, pears, dates, and white peaches	Cauliflower, jicama, mushrooms, onions, parsnips, turnips, white-fleshed potatoes, and white corn	



Red Pepper



Avocado



Black beans



Sweet potato



Broccoli



Carrots



Celery



Tomatoes



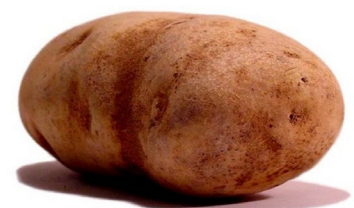
Iceberg lettuce



Corn



Green beans



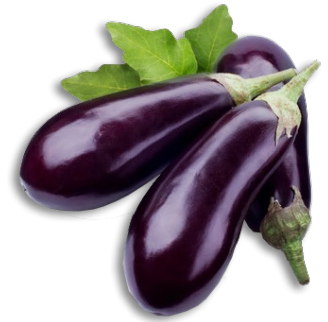
Russet potato



Cucumber



Pinto beans



Eggplant



Green pepper



Mushrooms



Onions



Kidney beans



Green peas



Pumpkin



Garlic



Olives



Beets

Vegetable Subgroups Matching Activity (INSTRUCTIONS)

Test your participants knowledge of vegetables and their benefits by matching them to their subgroup category.

The five vegetable subgroups associated with 2015-2020 DGA are:

1. Dark-Green Vegetables
2. Red & Orange Vegetables
3. Legumes (Beans & Peas – Tip: not all “peas” are considered legumes)
4. Starchy Vegetables
5. Other Vegetables

Activity instructions for a small group (15 people or less):

- ✓ Print copies of the 24 vegetables (pages 1-2) for about half of the participants in the group and have them partner up
(Note: if there is an odd number of people present, have a group of three people)
- ✓ Provide scissors for participants to cut out the vegetables OR pre-cut the vegetable pictures so they are ready for the activity
- ✓ Provide sheets with the labeled 5 subgroups for vegetable pictures to be attached (pages 4-5)
- ✓ Provide tape, glue sticks, or glue to attach the vegetables to the subgroup categories

Activity instructions for a large group (15 people or more):

- ✓ Ask participants to form groups of 5 to 10 people (can be at the same table)
 - ✓ Print several copies of the 24 vegetables (pages 1-2) and provide 12 or more vegetable cut outs per group (or 1 page to cut out per table)
 - ✓ Provide scissors for participants to cut out the vegetables OR pre-cut the vegetable pictures so they are ready for the activity
 - ✓ Provide sheets with the labeled 5 subgroups for vegetable pictures to be attached (pages 4-5)
 - ✓ Provide tape, glue sticks, or glue to attach the vegetables to the subgroup categories
-
- ❖ Ask participants to attach the vegetable cut-outs on the sheets of paper with their respective subgroup
 - ❖ Allow 10-15 minutes for them to do this
 - ❖ Review the correct vegetables for all five subgroups (see page 7 for answer key)
 - ❖ Finally review and discuss the vitamins, minerals, and antioxidants associated with each vegetable subgroup (page 6)

Place the vegetable cut-outs in the correct subgroup

1. Dark-Green Vegetables

2. Red & Orange Vegetables

3. Legumes (Beans & Peas – Tip: not all “peas” are considered legumes)

Place the vegetable cut-outs in the correct subgroup

4. Starchy Vegetables

5. Other Vegetables (please use back side of this sheet for any that do not fit on this page)

Nutrients & Potential Benefits for each Vegetable Subgroup

Please also refer to “Fight Aging with Food” handout for additional vitamin and antioxidant information

1. Nutrients found in certain **Dark-Green Vegetables:**

- Beta-carotene, zeaxanthin, lutein, vitamin E, iron, vitamin K, folic acid – important for eye health, skin health, heart health, blood health, may help prevent macular degeneration (eye disease common with aging) and certain types of cancer

2. Nutrients found in certain **Red & Orange Vegetables:**

- Vitamin A, beta-carotene, lycopene, flavonoids, vitamin C – important for eye health, skin health, may help to prevent certain types of cancer

3. Nutrients found in certain **Legumes (Beans & Peas – Tip: not all “peas” are considered legumes):**

- Thiamin, iron, fiber, zinc, vitamin E and vitamin k (soybeans) – important for blood health, bowel health/regularity, heart health

4. Nutrients found in certain **Starchy Vegetables:**

- Zeaxanthin, anthocyanidin, vitamin B3 (niacin), vitamin B5 (pantothenic acid), vitamin B6 (pyridoxine) – important for blood vessel health, may inhibit inflammation and tumor growth, energy metabolism, immune health

5. Nutrients found in certain **Other Vegetables:**

- Organosulfur compounds (found in onions, garlic, leeks) may protect against certain cancers
- Flavones (found in celery, cabbage, beets, cauliflower) may have anti-inflammatory and anti-cancer effects
- Folic acid, vitamin K (found in asparagus) important for blood health
- Riboflavin, pantothenic acid, (found in mushrooms) important for energy metabolism

Answer Key: Vegetables That Belong in Each Subgroup:

1. Dark-Green Vegetables

- Broccoli

2. Red & Orange Vegetables

- Pumpkin
- Sweet potato
- Carrots
- Tomatoes
- Red pepper

3. Legumes (Beans & Peas – Tip: not all “peas” are considered legumes)

- Black beans
- Pinto beans
- Kidney beans

4. Starchy Vegetables

- Russet potato
- Corn
- Green peas

5. Other Vegetables

- Beets
- Olives
- Garlic
- Onions
- Mushrooms
- Green pepper
- Eggplant
- Cucumber
- Celery
- Iceberg lettuce
- Avocado

Blueberry Chicken Salad

Number of Servings: 4 **Preparation/Cook Time:** 20 minutes

Ingredients:

- 2-4oz chicken breasts, cooked, diced (grilled, boiled or baked)
- 1/2 cup red onion, chopped
- 1 tablespoon white vinegar
- 1/2 cup minced green onion
- 1/4 cup flat leaf parsley, chopped
- 1/4 cup dried cranberries
- 1 cup fresh blueberries (or frozen, thawed and drained)
- 1/2 cup low fat mayonnaise
- 2 tablespoons non-fat plain yogurt or plain Greek yogurt
- 1/4 cup Dijon mustard
- 1/4 cup sliced almonds, toasted (or sunflower seeds)



Recipe in part, courtesy of the Chilean Fresh Fruit Association

Blueberry Chicken Salad

Number of Servings: 4 **Preparation/Cook Time:** 20 minutes

Ingredients:

- 2-4oz chicken breasts, cooked, diced (grilled, boiled or baked)
- 1/2 cup red onion, chopped
- 1 tablespoon white vinegar
- 1/2 cup minced green onion
- 1/4 cup flat leaf parsley, chopped
- 1/4 cup dried cranberries
- 1 cup fresh blueberries (or frozen, thawed and drained)
- 1/2 cup low fat mayonnaise
- 2 tablespoons non-fat plain yogurt or plain Greek yogurt
- 1/4 cup Dijon mustard
- 1/4 cup sliced almonds, toasted (or sunflower seeds)



Recipe in part, courtesy of the Chilean Fresh Fruit Association

Blueberry Chicken Salad

Number of Servings: 4 **Preparation/Cook Time:** 20 minutes

Ingredients:

- 2-4oz chicken breasts, cooked, diced (grilled, boiled or baked)
- 1/2 cup red onion, chopped
- 1 tablespoon white vinegar
- 1/2 cup minced green onion
- 1/4 cup flat leaf parsley, chopped
- 1/4 cup dried cranberries
- 1 cup fresh blueberries (or frozen, thawed and drained)
- 1/2 cup low fat mayonnaise
- 2 tablespoons non-fat plain yogurt or plain Greek yogurt
- 1/4 cup Dijon mustard
- 1/4 cup sliced almonds, toasted (or sunflower seeds)



Recipe in part, courtesy of the Chilean Fresh Fruit Association

Blueberry Chicken Salad

Number of Servings: 4 **Preparation/Cook Time:** 20 minutes

Ingredients:

- 2-4oz chicken breasts, cooked, diced (grilled, boiled or baked)
- 1/2 cup red onion, chopped
- 1 tablespoon white vinegar
- 1/2 cup minced green onion
- 1/4 cup flat leaf parsley, chopped
- 1/4 cup dried cranberries
- 1 cup fresh blueberries (or frozen, thawed and drained)
- 1/2 cup low fat mayonnaise
- 2 tablespoons non-fat plain yogurt or plain Greek yogurt
- 1/4 cup Dijon mustard
- 1/4 cup sliced almonds, toasted (or sunflower seeds)



Recipe in part, courtesy of the Chilean Fresh Fruit Association

Blueberry Chicken Salad



Instructions:

1. Place diced chicken breast in a mixing bowl.
2. Sprinkle red onion with vinegar and add to the bowl.
3. To the same bowl, add green onion, parsley, cranberries and blueberries. Fold gently to mix ingredients.
4. In a small mixing bowl add mayonnaise, yogurt, and mustard. Blend well and fold dressing into salad.
5. Garnish with toasted almonds (or sunflower seeds) and serve with whole grain crackers, whole grain bread or pita bread.

Tips:

- For a nut-free version, swap the almonds for sunflower seeds.
- Try chopped dried apricots or golden raisins in place of the cranberries.

Nutrition Facts (per serving and does not include crackers or bread):

Calories: 220 **Protein:** 16gm **Total Carbohydrates:** 21gm
Fiber: 3gm **Total Fat:** 7gm **Cholesterol:** 36mg **Sodium:** 663mg

Blueberry Chicken Salad



Instructions:

1. Place diced chicken breast in a mixing bowl.
2. Sprinkle red onion with vinegar and add to the bowl.
3. To the same bowl, add green onion, parsley, cranberries and blueberries. Fold gently to mix ingredients.
4. In a small mixing bowl add mayonnaise, yogurt, and mustard. Blend well and fold dressing into salad.
5. Garnish with toasted almonds (or sunflower seeds) and serve with whole grain crackers, whole grain bread or pita bread.

Tips:

- For a nut-free version, swap the almonds for sunflower seeds.
- Try chopped dried apricots or golden raisins in place of the cranberries.

Nutrition Facts (per serving and does not include crackers or bread):

Calories: 220 **Protein:** 16gm **Total Carbohydrates:** 21gm
Fiber: 3gm **Total Fat:** 7gm **Cholesterol:** 36mg **Sodium:** 663mg

Blueberry Chicken Salad



Instructions:

1. Place diced chicken breast in a mixing bowl.
2. Sprinkle red onion with vinegar and add to the bowl.
3. To the same bowl, add green onion, parsley, cranberries and blueberries. Fold gently to mix ingredients.
4. In a small mixing bowl add mayonnaise, yogurt, and mustard. Blend well and fold dressing into salad.
5. Garnish with toasted almonds (or sunflower seeds) and serve with whole grain crackers, whole grain bread or pita bread.

Tips:

- For a nut-free version, swap the almonds for sunflower seeds.
- Try chopped dried apricots or golden raisins in place of the cranberries.

Nutrition Facts (per serving and does not include crackers or bread):

Calories: 220 **Protein:** 16gm **Total Carbohydrates:** 21gm
Fiber: 3gm **Total Fat:** 7gm **Cholesterol:** 36mg **Sodium:** 663mg

Blueberry Chicken Salad



Instructions:

1. Place diced chicken breast in a mixing bowl.
2. Sprinkle red onion with vinegar and add to the bowl.
3. To the same bowl, add green onion, parsley, cranberries and blueberries. Fold gently to mix ingredients.
4. In a small mixing bowl add mayonnaise, yogurt, and mustard. Blend well and fold dressing into salad.
5. Garnish with toasted almonds (or sunflower seeds) and serve with whole grain crackers, whole grain bread or pita bread.

Tips:

- For a nut-free version, swap the almonds for sunflower seeds.
- Try chopped dried apricots or golden raisins in place of the cranberries.

Nutrition Facts (per serving and does not include crackers or bread):

Calories: 220 **Protein:** 16gm **Total Carbohydrates:** 21gm
Fiber: 3gm **Total Fat:** 7gm **Cholesterol:** 36mg **Sodium:** 663mg

Chipotle-Lime Three Bean Salad

Number of Servings: 8 **Preparation/Cook Time:** 30 minutes

Ingredients:

- 1-15 ounce can black beans, drained and rinsed (no-added-salt preferred)
- 1-15 ounce can garbanzo beans, drained and rinsed (no-added-salt preferred)
- 1-15 ounce can red kidney beans, drained and rinsed (no-added-salt preferred)
- 1 tablespoon, finely chopped green onion
- 1 red bell pepper, chopped
- ½ cup cilantro, finely chopped
- 2 teaspoons chipotle in adobo sauce*
- 1 teaspoon sugar
- Pinch of salt (optional)
- Juice of 2 limes and zest of 1 lime



Chipotle-Lime Three Bean Salad

Number of Servings: 8 **Preparation/Cook Time:** 30 minutes

Ingredients:

- 1-15 ounce can black beans, drained and rinsed (no-added-salt preferred)
- 1-15 ounce can garbanzo beans, drained and rinsed (no-added-salt preferred)
- 1-15 ounce can red kidney beans, drained and rinsed (no-added-salt preferred)
- 1 tablespoon, finely chopped green onion
- 1 red bell pepper, chopped
- ½ cup cilantro, finely chopped
- 2 teaspoons chipotle in adobo sauce*
- 1 teaspoon sugar
- Pinch of salt (optional)
- Juice of 2 limes and zest of 1 lime



Chipotle-Lime Three Bean Salad

Number of Servings: 8 **Preparation/Cook Time:** 30 minutes

Ingredients:

- 1-15 ounce can black beans, drained and rinsed (no-added-salt preferred)
- 1-15 ounce can garbanzo beans, drained and rinsed (no-added-salt preferred)
- 1-15 ounce can red kidney beans, drained and rinsed (no-added-salt preferred)
- 1 tablespoon, finely chopped green onion
- 1 red bell pepper, chopped
- ½ cup cilantro, finely chopped
- 2 teaspoons chipotle in adobo sauce*
- 1 teaspoon sugar
- Pinch of salt (optional)
- Juice of 2 limes and zest of 1 lime



Chipotle-Lime Three Bean Salad

Number of Servings: 8 **Preparation/Cook Time:** 30 minutes

Ingredients:

- 1-15 ounce can black beans, drained and rinsed (no-added-salt preferred)
- 1-15 ounce can garbanzo beans, drained and rinsed (no-added-salt preferred)
- 1-15 ounce can red kidney beans, drained and rinsed (no-added-salt preferred)
- 1 tablespoon, finely chopped green onion
- 1 red bell pepper, chopped
- ½ cup cilantro, finely chopped
- 2 teaspoons chipotle in adobo sauce*
- 1 teaspoon sugar
- Pinch of salt (optional)
- Juice of 2 limes and zest of 1 lime



Chipotle-Lime Three Bean Salad

Instructions:

1. Place the black beans, garbanzo beans and kidney beans in a large bowl. Add the green onion, bell pepper, and cilantro and stir to combine.
2. In a small dish, stir together the chipotle in adobo sauce, sugar, salt (if using), lime juice and lime zest.
3. Pour the lime dressing over the beans and stir to combine. Place in the refrigerator for at least 15 minutes before serving to let the flavors infuse.

*Tip: this is the sauce from canned chipotle peppers in adobo. If you want to add spicier flavor add a whole chipotle pepper to a food processor with the sauce, puree and add to bean dressing. For a quick substitute, use 1 teaspoon chipotle chili powder for the sauce.

Nutrition Facts (per serving):

Calories: 171 **Protein:** 9gm **Total Carbohydrates:** 31gm

Fiber: 9gm **Total Fat:** 1gm **Cholesterol:** 0mg **Sodium:** 359mg

Chipotle-Lime Three Bean Salad

Instructions:

1. Place the black beans, garbanzo beans and kidney beans in a large bowl. Add the green onion, bell pepper, and cilantro and stir to combine.
2. In a small dish, stir together the chipotle in adobo sauce, sugar, salt (if using), lime juice and lime zest.
3. Pour the lime dressing over the beans and stir to combine. Place in the refrigerator for at least 15 minutes before serving to let the flavors infuse.

*Tip: this is the sauce from canned chipotle peppers in adobo. If you want to add spicier flavor add a whole chipotle pepper to a food processor with the sauce, puree and add to bean dressing. For a quick substitute, use 1 teaspoon chipotle chili powder for the sauce.

Nutrition Facts (per serving):

Calories: 171 **Protein:** 9gm **Total Carbohydrates:** 31gm

Fiber: 9gm **Total Fat:** 1gm **Cholesterol:** 0mg **Sodium:** 359mg

Chipotle-Lime Three Bean Salad

Instructions:

1. Place the black beans, garbanzo beans and kidney beans in a large bowl. Add the green onion, bell pepper, and cilantro and stir to combine.
2. In a small dish, stir together the chipotle in adobo sauce, sugar, salt (if using), lime juice and lime zest.
3. Pour the lime dressing over the beans and stir to combine. Place in the refrigerator for at least 15 minutes before serving to let the flavors infuse.

*Tip: this is the sauce from canned chipotle peppers in adobo. If you want to add spicier flavor add a whole chipotle pepper to a food processor with the sauce, puree and add to bean dressing. For a quick substitute, use 1 teaspoon chipotle chili powder for the sauce.

Nutrition Facts (per serving):

Calories: 171 **Protein:** 9gm **Total Carbohydrates:** 31gm

Fiber: 9gm **Total Fat:** 1gm **Cholesterol:** 0mg **Sodium:** 359mg

Chipotle-Lime Three Bean Salad

Instructions:

1. Place the black beans, garbanzo beans and kidney beans in a large bowl. Add the green onion, bell pepper, and cilantro and stir to combine.
2. In a small dish, stir together the chipotle in adobo sauce, sugar, salt (if using), lime juice and lime zest.
3. Pour the lime dressing over the beans and stir to combine. Place in the refrigerator for at least 15 minutes before serving to let the flavors infuse.

*Tip: this is the sauce from canned chipotle peppers in adobo. If you want to add spicier flavor add a whole chipotle pepper to a food processor with the sauce, puree and add to bean dressing. For a quick substitute, use 1 teaspoon chipotle chili powder for the sauce.

Nutrition Facts (per serving):

Calories: 171 **Protein:** 9gm **Total Carbohydrates:** 31gm

Fiber: 9gm **Total Fat:** 1gm **Cholesterol:** 0mg **Sodium:** 359mg