

Growing and Using Salad Greens

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THE PLATE

TEXAS A&M AGRILIFE EXTENSION



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First steps for salad greens garden

- ▶ What do you want to grow?
- ▶ How much space do you have?
- ▶ Do you have time for a garden?
- ▶ What is your gardening experience?
- ▶ In ground, raised bed or container garden?
- ▶ Where can you get more information?



Locating your garden

- ▶ Minimum of 6-8 hours of sunshine
- ▶ Morning sun vs. afternoon sun
- ▶ Is water available nearby?
- ▶ Protection from friendly and unfriendly animals
- ▶ What kind of gardening equipment is needed?
- ▶ Protection from freeze, frosts



Adequate moisture and drainage

- ▶ Locate garden near a source of water
- ▶ Hand watering, sprinkler system, rain barrel, drip irrigation
- ▶ Use compost for drainage and nutrients
- ▶ Use mulch to help retain moisture
- ▶ Use deep, infrequent watering



Good soil...a healthy foundation

- ▶ Remove weeds, rock, debris
- ▶ Order a soil test from Texas A&M
- ▶ Amend garden with organic matter regularly
- ▶ Need 8-12 inches of loose tillable soil
- ▶ Ideal pH is 6.5-7.0 (DFW = 7.2 pH)
- ▶ Do not work soil when it is wet
- ▶ May take 3-5 years to build good soil from native clay
- ▶ Add expanded shale to clay soils of North Texas
- ▶ Consider raised bed with special soil mix to start
- ▶ Build a compost pile



The right plant... at the right time

- ▶ Lettuces
- ▶ Cabbage
- ▶ Greens
- ▶ Vegetables
- ▶ Root crops
- ▶ Herbs



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Vegetable Planting Guide

Vegetable Types	Planting depth in inches	Distance between rows	Average crop height ft	Spring planting dates* North Central Texas	Fall planting dates* North Central Texas	Days to crop maturity	Average (season) days
Asparagus	8-12	48-60	5	Feb. 1 - Mar. 1	Not Advised	700	60
Beans, snap bush	1-1 1/2	24-36	11/2	Mar. 18 -Apr.15	Aug. 1 - Sep. 15	45-60	15
Beans, snap pole	1-1 1/2	36-48	6 - 8	Mar. 18 -Apr.15	Jul. 30 -Aug. 10	60-70	30
Beans, Lima bush	1-1 1/2	30-36	11/2	Mar. 18 -Apr.15	Aug.15 - Sep.15	65-80	15
Beans, Lima pole	1-1 1/2	36-48	6 - 8	Mar. 18 -Apr.15	Jul. 25 -Aug. 15	75-85	40
Beets	1	12-24	11/2	Feb. 1 - Feb 15	Sep. 1 - Oct. 1	50-60	30
Broccoli	1/2	24-36	3	Feb. 1 - Feb 15	Aug.15- Sep.30	60-80	40
Brussels Sprouts	1/2	24-36	2	Feb. 1 - Feb 15	Aug.15- Sep.30	90-100	25
Cabbage	1/2	24-36	11/2	Feb. 1 - Feb 15	Aug.15- Sep.30	60-90	40
Cabbage, Chinese	1/2	18-30	11/2	Feb. 1 - Feb 15	Aug.10- Aug.30	65-70	25
Cantaloupe	1	48-96	1	Apr. 5 - May 1	Jul. 30 -Aug. 10	85-100	20
Carrot	1/2	12-24	2	Feb. 1 - Feb 15	Sep.1 - Sep.30	70-80	20
Cauliflower	1/2	24-36	3	Feb. 1 - Feb 15	Aug.15 -Sep.20	70-90	15
Chard, Swiss	1	18-30	2	Feb. 1 - Mar. 3	Aug.15 -Sep.15	45-55	40
Cilantro	1/2	12-24	2	Feb. 1 - Apr. 1	Sep. 1 - Sep. 30	40-60	30
Collard (Kale)	1/2	18-36	2	Feb. 1 - Mar. 3	Aug.25- Sep.20	50-80	60
Corn (sweet)	1/2	24-36	6 - 8	Mar. 18 -Apr. 30	Aug.10 -Aug.25	70-90	15
Cucumber	1/2	48-72	1	Mar. 18 -Apr. 30	Aug. 25-Sep. 10	50-70	30
Eggplant	1/2	24-36	3	Apr 1.- Apr. 30	Jul. 30- Aug. 25	80-90	90
Garlic	1 - 2	10-18	1	Jan. 1 - Feb 15	Sept 15 - Oct 30	140-150	--
Kohlrabi	1/2	12-18	11/2	Feb. 1 - Mar. 10	Aug. 15 - Sep.20	55-75	15
Lettuce	1/2	12-24	1	Feb. 1 - Mar. 31	Sep. 1 - Sep. 30	40-80	25
Mustard	1/2	12-24	11/2	Mar.18 - Apr. 30	Aug.15 - Sep.30	30-40	30
Okra	1	24-36	5 - 7	Apr. 1 - Apr. 30	Jul. 1 - Aug. 25	55-65	90
Onion (plants)	1/2 - 1	12-18	11/2	Jan. 1 - Feb. 15	Aug.15 -Sep.15	80-120	40
Onion (seed)	1/2	12-18	11/2	Jan. 1 - Feb. 15	Sep. 1 - Sep. 20	90-120	40
Parsley	1/2	12-24	11/2	Feb. 1 - Mar. 15	Aug.15 -Oct. 10	70-90	90
Peas, English	2 - 3	18-36	2	Jan. 20 - Mar. 3	Sep. 15 - Nov. 1	55-90	10
Peas, black-eyed	2 - 3	24-36	21/2	Mar. 30- Apr. 30	Aug.15 - Sep. 1	60-70	30
Peppers	1/2	24-36	2 - 3	Mar. 30- May 30	Jul. 30 -Aug. 25	60-90	90
Potato, Irish	4	30-36	2	Feb. 1 - Feb 15	Jul. 30- Aug. 10	65-100	--
Potato, Sweet	3 - 5	36-48	11/2	Apr.15 - Jun. 1	Not Advised	100-130	--
Pumpkin	1 - 2	48-96	11/2	Mar. 25 -Apr. 25	Aug.10 -Aug. 25	75-100	--
Radish	1/2	12-18	1/2	Feb. 10 - Apr. 15	Sep.20 - Nov.15	25-40	15
Spinach	1/2	12-18	1	Jan. 20 - Mar. 10	Sep.15 - Nov. 1	40-60	40

Growing salad greens



- ❖ Greens include lettuce, herbs, salad greens and leafy green vegetables such as cabbage, collards, kale, mustard, spinach and Swiss chard.
- ❖ Most greens are cool-season crops and must be grown in the early spring or fall in Texas. Some greens, especially kale, will withstand temperatures below freezing and can be grown all winter.
- ❖ Greens grow best in a well-drained soil with lots of organic matter. They prefer full sunlight, but will tolerate partial shade.
- ❖ The soil should be worked at least 8 to 10 inches deep in the early spring when it is dry enough not to stick to garden tools. Break up large clods and remove trash and weeds. Work the soil into beds about 4 inches high. Add compost or organic matter before digging the soil.
- ❖ Greens grow best when given plenty of fertilizer. Adequate nitrogen is needed to develop the dark green leaf color. Before planting the seeds, apply a general garden fertilizer such as 10-10-10 at the rate of 2 to 3 pounds per 100 square feet. Mix fertilizer into the soil about 3 inches.



Use transplants or seeds?

- ❖ Which seeds should you sow directly into the garden, and which do better if you plant them as seedlings -- either purchasing transplants or starting the seeds indoors yourself?
- ❖ Some seeds are more successfully sown directly into the garden. These plants usually mature relatively quickly, or have delicate roots that are easily damaged during transplanting. Also, plants with taproots, such as carrots, radishes and beets, generally don't transplant well so it's best to start them from seed.
- ❖ Other plants have long growing seasons, or must be planted outdoors in early spring so they mature before the hot weather arrives. These do best when set in the garden as transplants.
- ❖ Raising transplants from seeds take more time and planning and must be started under cover or indoors, then gradually hardened. Purchasing transplants costs more, but can be more time efficient.



Where do I find?

- ❖ Local big box stores: Home Depot, Lowes, Walmart (Bonnie)
- ❖ Local nurseries: North Haven Gardens, Calloway's Nursery
- ❖ Seed catalogs: Southern Seed Savers, Baker Creek, Burpee



Let's talk salad greens

How many can you name here?



Mesclun=a mixture of salad greens

1. Frisee
2. Arugula
3. Endive
4. Radicchio
5. Mizuna
6. Escarole
7. Baby beet greens
8. Watercress
9. Tatsoi
10. Butterhead
11. Romaine
12. Mache
13. Loose leaf



Arugula

Varieties: Rocket • Italian Cress • Mediterranean Rocket
Rugola • Rugula • Rocquette • Rucola

Characteristics: This is a well-known variety of salad green that tastes more peppery than bitter. It also is called rocket.

Gardening tips: Arugula is a fast growing, cool season green. It is perfect for the early spring garden and for extending into fall.

As long as the temperatures stay cool, full sun is the best exposure. As the weather warms, it appreciates partial shade, especially in the afternoon. Arugula is an annual. It will bolt to seed when the temperatures rise.

Height: 6 to 12 in. **Spread:** 12 to 18 in.

You can start harvesting baby leaves in about 21 days. For full-sized heads, most varieties take about 40 days.

Nutrition: It ranks near the bottom of greens nutritionally. It's a tasty choice with some vitamin A, vitamin C, iron, and calcium.



Baby beet greens

Characteristics: When the leaves of the beet top are immature, they are tender and slightly spicy. The purplish-red veins are visually striking and can dress up any salad. When wilted, the veins become brighter in color and a little bit sweeter.

Gardening tips: Beets prefer well-drained, rich soil, and grow well in traditional garden beds, raised beds, or containers. It's a good idea to amend with compost.

Beet greens grow best in full sun, but will tolerate partial shade. Beet seeds should be soaked overnight and planted one inch deep, and three inches apart.



Butterhead lettuce

Varieties: Bibb • Boston • Buttercrunch

Characteristics: A type of head lettuce, the leaves of Boston and Bibb lettuces are soft. And as this variety's name implies, the texture of a butter lettuce is indeed smooth like butter.

Gardening tips: Lettuce is a cool season crop and is best grown in either spring or fall. Lettuce seed germinates best around 70 degrees F. Start early spring plantings with seedlings.

Lettuce seeds need light to germinate, so barely cover the seed with soil and keep it moist. Lettuce is a quick grower. It is ready to transplant when several sets of leaves have developed.

Lettuce likes rich organic soil with, compost or composted manure. Amend your soil before planting and side dress again mid-season. Salad greens need regular water.

Nutrition: Butter lettuce is low in sodium, a good source of vitamin A, and has small amounts of iron and calcium.



Dandelion

Varieties: French • Amélioré à Coeur
Pissenlit Coeur • Improved Broad Leaved
Arlington • Improved Thick-Leaved • Italian

Characteristics: Most gardeners consider dandelions a weed and seek to remove it from their garden and yard. Common Dandelion has all the health benefits, but they tend to be more bitter than some of the other varieties of dandelion you can buy.

Gardening tips: You don't need to do much to grow common dandelions. Chances are there is a whole yard full of them near where you live, but there are thousands of varieties and cultivars to be found around the world.

Nutrition: Dandelion greens contain vitamin C, potassium, calcium, iron, magnesium, phosphorus, thiamin, riboflavin, beta carotene and fiber.



Endive

Varieties: Belgian • Witloof • Chicory • Belgian

Characteristics: The unique oval shape, soft satiny texture, and slight bitterness all mean endive's a great addition to any salad. It's scoop shape makes for edible servers, perfect for appetizers.

Gardening tips: Endive is best planted in early spring. Start in small pots or egg cartons in a greenhouse. When growing endive, transplant your new plants after any danger of frost. Plant in well-draining and loose soil. The plants also enjoy plenty of sun but will tolerate shade.

Plant your endive seeds at a rate of about ½ ounce of seeds per 100 feet of row. Once they grow, thin the plants to about one plant per six inches, with rows 18 inches apart.





Escarole

Varieties: Batavian • Scarole
Broad-leaved

Characteristics: Related to frisée, this mildly bitter leafy green is large and crisp. Escarole is often used in soups and paired with beans.

Gardening tips: Plant escarole in full sun in well-draining soil that is amended with compost. The soil should have a pH of 5.0 to 6.8. Propagation from seed should start 4-6 weeks before the last average frost date for your area. Seeds can also be started indoors for later transplantation 8-10 weeks before the last average frost .

When growing escarole plants try to harvest before temps regularly get into the 80's. It takes 85-100 days until it's time for harvesting escarole. Sow the seeds $\frac{1}{4}$ inch deep and thin the seedlings to 6-12 inches apart. Growing escarole plants should be spaced 18-24 inches apart.

Keep the escarole plants consistently moist. Allowing plants to dry out too frequently will result in bitter greens. Side-dress the escarole plants with compost midway through their growing season.

Frisée

Varieties: Curly endive • Chicory,
Chicory endive • Curly chicory



Characteristics: These curled leaves tinged with yellow and green are slightly bitter in taste, have a crunchy stem, and add a lot of texture. Their pale green, white, and yellow coloring is a result of the producer shielding them from light during the growing process.

Gardening tips: Frisée is a cold weather vegetable, so plant it like lettuce. Just a little bit of compost in the soil will help frisée grow well, and it can be seeded directly into the garden or started indoors. Use succession planting to get more continuous production.

Provide your frisée plants with continuous water, without overwatering them. And, be sure to protect them from the sun.



Loose leaf

Varieties: Austrian Greenleaf • Bijou
Black Seeded Simpson • Bronze Leaf
Gold Rush • Green Ice • New Red Fire • Oakleaf
Perilla Green • Perilla Red • Merlot • Red Sail
Ruby • Salad Bowl

Characteristics: These have a mild flavor and are very pliable, despite the crunchy stem. Their uneven ruffled surfaces add layers of texture to salads. Because the leaves are so large, it's best to tear them up into bite-size pieces.

Gardening tips: These are one of the easiest types of lettuce to grow – the loose leaf varieties of lettuce form no head or heart. Harvest these varieties either whole or by the leaf as they mature. Plant at weekly intervals starting in early March and again in September.

Thin loose leaf lettuce to 4-6 inches apart. These varieties are slow bolting and heat resistant and mature within 40-45 days.

Nutrition: Leaf lettuce, whether red or green, has a mild taste, making it a good choice for getting vitamins A and K into the diet. Loose leaf lettuce does not contain large amounts of fiber.

Mache

Varieties: Field salad • Lamb's lettuce
Corn salad • Field lettuce • Feticus
Coquille • d'Etampes • Elan • Piedmont



Characteristics: Sometimes sold with its soil still attached, this salad green imparts a mild and slightly sweet flavor to a salad. Its leaves are also very delicate and will bruise easily.

Gardening tips: Plant in full sun to partial shade early in the spring, but later plants will appreciate partial shade. Mache is usually grown as an annual. You can seed it in the fall and it should resume growing in the spring.

Mature plant size is 6 - 8 in. spread is 2 - 8 in. tall, when in bloom. Matures 40 - 60 days, for spring planted seed. Sow directly in the soil in early spring or in the fall. Soil temperatures should be at least 50 F. and seed can be slow to germinate. Broadcast the seed and cover lightly.

Keep the soil moist, until germination, and then water weekly as needed. Plants should germinate in a week to 12 days. Gardeners in USDA Zones 7 and above will have better luck with a fall crop.



Radicchio

Varieties: Chioggia • Red chicory
Red leaf • Chicory • Red Italian chicory
Guilio • Rossano • Nerome Di Treviso

Characteristics: Pronounced rah-dick-ee-yo, you can find this deep-red-purple vegetable sold either as a compact round head or shaped like its relative endive. The bright coloring makes it stand out. When cooked, the red-purple hue turns brown and what was once bitter becomes sweet.

Garden tips: Radicchio may be grown as a spring or fall vegetable, but radicchio does best grown in cool temperatures. Radicchio is frost tolerant, prefers plenty of sun, but tolerates shade. Radicchio can be direct seeded or transplanted depending on the time of year. If transplanting, start the seeds indoors 4 to 6 weeks before transplanting. Direct sow after the danger of frost has passed.

Plants should be 8-12 inches apart in the row depending on the cultivar. Maturation occurs around the 125-130 day mark. Radicchio plants need a constant amount of irrigation due to shallow roots.

Romaine

Varieties: Brown Golding • Chaos Mix II black/white
Devil's Tongue • Dark Green Romaine • De Morges Braun
Hyper Red Rumble • Little Leprechaun • Mixed Chaos black
Mixed Chaos white • Nova F3 • Nova F4 black/white
Paris Island Cos • Valmaine • Winter Density



Characteristics: This large leafy lettuce is stiffer than most; a thick center rib gives it a real crunch and a slightly bitter taste. This is the lettuce used for Caesar salad.

Gardening Tips: Romaine varieties are typically 8-10 inches tall and upright growing with spoon-shaped, tightly folded leaves and thick ribs. It is a medium green on the exterior to greenish white inside with the outer leaves sometimes being tough while the interior foliage is tender.

Most varieties mature within 70 days.

Nutrition: Romaine lettuce is another good source of folic acid. Its dark green color, long leaves, and crunchy texture make it a very popular salad base. Romaine is rich in vitamins A and K.



Sorrel

Varieties: French, Garden, Bloody

Characteristics: Sorrel is a tangy, lemony flavored plant. The youngest leaves have a slightly acidic taste, but you can use mature leaves steamed or sautéed like spinach. Sorrel is also called sour dock and grows wild in many parts of the world.

Gardening tips: Garden sorrel and French sorrel are the two cultivated varieties of the herb. Garden sorrel needs damp soils and temperate conditions. French sorrel performs best when it is grown in dry, open areas with inhospitable soils. Planting sorrel from seed or dividing the roots are the two most common ways to propagate. Sorrel will usually bolt when temperatures begin to soar, usually in June or July.





Watercress

Varieties: Upland • Curly cress
Peppercress • Land cress

Characteristics: Watercress is often a garnish and has a peppery taste. Sold in bunches, watercress has a tough, fibrous stem and small green leaves. Be sure to wash cresses thoroughly.

Gardening tips: Watercress can be grown from seed, transplants or cuttings. Prior to planting, choose a sunny location and amend the garden soil with 4-6 inches of compost down to a depth of 6-8 inches. Seeds are tiny, so they need to be lightly broadcast over the prepared site.

Sow three weeks before the frost free date for your area. This plant germinates best in cool conditions 50-60 F. Keep the planting area moist. Seedlings will appear in about 5 days and transplant 8 inches apart once all chance of frost has passed.

Nutrition: It's more nutrient-rich than romaine and leaf lettuce, containing almost all of the daily recommended intake for vitamins A and K.

Asian Greens

Varieties: Bok or Pak Choy • Gai Lan • Yau Choy • Gai Choy • Water Spinach
Chinese Cabbage • Brisk Green • Jade Pagoda • Michihili • Monument • Napa

Characteristics: Asian greens offer an assortment of leafy greens, crisp stems and even edible flowers. Most Asian greens prefer shorter, cooler days, so growing them is an easy way to keep producing well into autumn.

Growing tips: Plant Asian Greens in early spring and late summer six to 12 weeks before/after first frost. Sow seeds indoors or direct-sow them in the garden.

Transplant seedlings when they are four weeks old. Choose bolt-resistant varieties.

All Asian greens grow best in moist, fertile, well-drained soil with a pH between 6.0 and 6.5. Choose a sunny site, loosen the soil to at least 12 inches deep, and compost.

Sow seeds about 2 inches apart and a quarter inch deep, then water well to settle the seeds into the soil. After seeds germinate (often in less than five days), gradually thin them to proper spacing.

Large Chinese cabbage, Chinese broccoli and flowering mustard should be thinned to 14 inches apart, but small bok choy plants do well with just 6 inches between plants.

Nutrition: Asian greens are excellent sources of calcium and vitamins A, C and K.



Mizuna

Varieties: Japanese green • Spider Mustard • Xue Cai
Kyona • Potherb mustard • California Peppergrass



Characteristics: This Japanese mustard green is typically sold as part of a premade salad mix but can be purchased loose at the farmers' market or specialty shop. Mizuna has a relatively strong pungent flavor, but its flavor won't overpower a dish. The small jagged edges that make mizuna look like miniature oak leaves.

Gardening tips: Care for mizuna greens is similar to that for other Asian mustard-like greens. Sow seeds 6 to 12 weeks before first frost or in late spring.

Plant seeds in moist, but well-drained soil. Before planting, loosen the soil to 12 inches deep and mix in some manure. Plant the seeds 2 inches apart, $\frac{1}{4}$ inch deep, and water well. After seeds have germinated thin to 14 inches apart.

Tatsoi

Varieties: Tatsoi • Spoon cabbage • Rosette bok choy

Characteristics: The small, rounded leaves of this Asian salad green have a mild, mustard-like flavor. Baby tatsoi is usually sold loose, can be purchased whole, in the shape of a rosette, and it is often cooked intact in Chinese stir-fries.

Gardening tips: Tatsoi plants are biennial and may survive undercover in USDA Zones 4 - 7, but quickly bolts to seed.

Tatsoi grows best in partial sun, about 3 - 5 hours each day is ideal, but it can handle full if it is kept well watered.

Full-size heads will grow to 8 - 10 inches tall. Harvest tatsoi leaves when they are about 4 inches long. Dwarf tatsoi matures in 20 - 25 days. Full-size tatsoi takes 40 - 50 days.

To harvest the whole head, slice the plants off about an inch above the ground and they should re-sprout. The new plants will be smaller, but still delicious.



Harvesting salad greens

Cleaning greens: There are several ways to wash garden lettuce. Simply rinse lettuce under running water, pluck off each outer leaf and gently rub them clean. Or cut off the lettuce head and separate the leaves before swishing them in a bowl of cold water, where the dirt and sand sink to the bottom.

Drying greens: Shake the water from the leaves and place them on paper towels to dry. Another method involves a salad spinner. After separating the lettuce leaves, place them (a few at a time) in the colander and spin away the excess water.

Storing greens: Individual lettuce leaves can be placed on paper towels and rolled up prior to placing them in re-sealable plastic bags or simply place them directly in the plastic bag instead. Carefully push out the air before sealing the bag and place the bag in the refrigerator.

Always make sure that lettuce is dry prior to storing in the refrigerator. Also, keep lettuce away from fruit, which gives off ethylene gas. Lettuce will typically store this way with no ill effects for six to eight days.



More greens (healthier!)



Beet greens

Cabbage

Collards

Kale

Mustard

Spinach

Swiss Chard



Spinach

Varieties: Bloomsdale • Melody • Space • Tye • New Zealand • Malabar

Characteristics: Spinach has many nutritional benefits including its high vitamin and mineral counts, caloric density, and its contributions to heart health. Malabar and New Zealand spinach are good substitutes for spinach during hot weather, as they tolerate high temperatures, but not cold weather.

Gardening tips: Plant spinach as early as the soil can be worked in the spring or in August or later in the fall. The hot summer causes spinach to “bolt.” Malabar and New Zealand spinach seeds are slow to germinate. Plants can be grown indoors and transplanted after the last frost in spring.=

Nutrition: Spinach packed with vitamin A and a great source of vitamins C and K, iron, and fiber. Spinach also contains more folic acid than most salad greens, which helps convert the food you eat into energy and produces healthy red blood cells.



Kale

Varieties: • Dwarf Blue Curled Scotch
Dwarf Blue Curled • Green Curled
Rebor • Red Russian • Vates • Winterbor



Characteristics: Kale is a cool-season crop that can be planted in early spring or late fall. All varieties prefer cool temperatures and will be sweetened by a touch of frost. Hot weather turns kale bitter.

Gardening Tips: Kale plants like a rich soil, high in organic matter a pH of 5.5 to 6.5. The optimal soil temperature for planting is 60 to 65 F. Kale can be direct seeded or started indoors and set out as transplants. Start plants indoors about six weeks before last expected frost date. Kale seeds germinate quickly in warm soil and sprout in 5 to 8 days. Cover seeds with about 1/2 inch of soil and keep moist.

Use compost or feed with some type of high nitrogen. Mulching under the plants will keep the soil cool and moist.

Nutrition: One cup fills your daily requirement for vitamins A, C, and K.



Cabbage

Varieties: • Early Jersey Wakefield • Golden Acre • Green Boy
• Market Prize • Rio Verde • Ruby Ball • Savoy King



Characteristics: Cabbage can be grown in both spring and fall, but fall planting often is more successful because very early spring planting is often delayed by wet or cold weather. Delayed spring planting exposes plants to too-hot weather before they mature.

Garden tips: Most cole crops need 18 to 24 inches between plants and 36 inches between rows. Cabbage can easily spread 2 feet if well fertilized. Add a 3-inch layer of organic matter—such as compost, leaves, or grass clipping to the garden soil and turn it in a few weeks before planting.

Nutrition: Cabbage is one of the most nutritious vegetables. It is low in calories and high in protein, vitamins and minerals.



Swiss chard

Varieties: Bright Lights • Bright Yellow
Fordhook Giant • Rhubarb Red

Characteristics: Swiss chard is a member of the beet family and has a taste similar to beet greens. The plants grow 1 to 2 feet tall and the crinkled leaves have prominent central ribs.

Gardening tips: Swiss chard is very tolerant of heat and light freezes and can be harvested all year in most of Texas. Seeds should be planted 2 to 3 weeks before the average last killing spring frost. Seed can be sown for harvesting through the winter and most of the following year. Swiss chard is unusual because a single planting can be harvested for well over a year or perhaps into the second year if the flower stalks are removed.

Nutrition: A relative of the beet family, chard tastes similar to spinach. While it does have a higher sodium count, it's loaded with vitamins A, C, and K, and also provides some iron and calcium.





Collards

Varieties: Blue Max • Champion • Flash • Georgia LS
Georgia Southern • Top Bunch, • Vates

Characteristics: Collards tolerate more heat and cold than most other vegetables grown in Texas. They are easy to grow, productive, and well suited to either large or small gardens. Collards grow best in cool weather and need as much sunlight as possible.

Gardening tips: Collards need a deep soil that is well drained and well prepared. The roots of a collard plant easily reach depths of 2 feet or more. Dig the soil as deep as possible or at least 10 inches. Collards can be started from transplants or from seeds sown directly in the garden. Transplants usually are used for the spring crop. They add 4 to 5 weeks to the growing season.

Nutrition: Collards are one of the most nutritious vegetables. They are low in calories and high in protein, vitamins and minerals.

Mustard Greens

Varieties: Florida Broadleaf • Green Wave • Large Smooth Leaf
Red Mustard • Savanna • Southern Giant Curled • Tender Green



Characteristics: Both the broadleaf and curled leaf varieties are attractive and add green to a flower bed. Some gardeners do not like curled mustard because it is hard to wash sand and dirt from the wrinkled leaves. A well-mulched garden usually does not have this problem.

Gardening tips: Plant mustard in full sun. For best production, they also need well-drained soil. Plant as soon as the soil can be worked in the spring. The seeds will sprout if the soil temperature is 40 degrees F or higher. For a fall crop, start planting 8 to 10 weeks before the first frost.

Nutrition: When cooked properly, mustard and turnip greens are high in minerals and vitamins A and C.

What is a salad?

A salad is a dish consisting of a mixture of small pieces of food usually vegetables. However, different varieties of salad may contain virtually any type of ready-to-eat food. Salads are typically served at room temperature or chilled, with notable exceptions such as German potato salad which is served warm.

Garden salads usually use a base of leafy greens such as lettuce, arugulas/rocket, kale or spinach, and are common enough that the word *salad* alone often refers specifically to garden salads. Other types include bean salad, tuna salad, fattoush, Greek salad (vegetable based, but without leafy greens), and somen salad (noodle-based salad).

The sauce used to flavor a salad is commonly called a salad dressing; most salad dressings are based on either a mixture of oil and vinegar or a fermented milk product like kefir.

Salads may be served at any point during a meal:

Appetizer salads—light, smaller-portion salads served as the first course of the meal.

Side salads—to accompany the main course as a side dish.

Main course salads—usually containing a portion of a high-protein food, such as meat, fish, eggs, legumes, or cheese.

Dessert salads—sweet versions containing fruit, gelatin, sweeteners or whipped cream.

What is organic?



Organic terms

Made with Organic _____ - Used when a product contains at least 70% organic ingredients (excluding salt and water)

Organic - Any product that contains a minimum of 95% organic ingredients (excluding salt and water)

100% Organic - Any product that contains 100% organic ingredients (excluding salt and water)

USDA Certified Organic

Grown and processed using strict guidelines

NO genetically modified organisms

Produce: no synthetic fertilizers/pesticides

	Organic	Natural
Toxic persistent pesticides	Not allowed	Allowed
GMOs	Not allowed	Allowed
Antibiotics	Not allowed	Allowed
Growth hormones	Not allowed	Allowed
Sludge & irradiation	Not allowed	Allowed
Animal welfare requirements	Yes	No
Cows required to be on pasture for pasture season	Yes	No
Lower levels of environmental pollution	Yes	Not Necessarily
Audit trail from farm to table	Yes	No
Certification required, including inspections	Yes	No
Legal restrictions on allowable materials	Yes	No

Do you know what you are eating?

Labels can tell you a lot about a product. They identify the brand, where it was produced, expiration date, nutritional information, and claims about how it was produced. The United States Department of Agriculture (USDA), Agricultural Marketing Service (AMS) and the Food and Drug Administration (FDA) all play roles in the legal regulation of label claims. Each product must meet minimum requirements to bear the claim on its label.

Common food labels

Non-GMO or GMO-Free - Used by the food industry to advertise that a food is free from genetically modified organisms. This is a VOLUNTARY label.

Local - Produced and processed within a particular area (e.g. within an undefined # of miles, commonly considered to be less than 400 miles from its origin, or within the state).

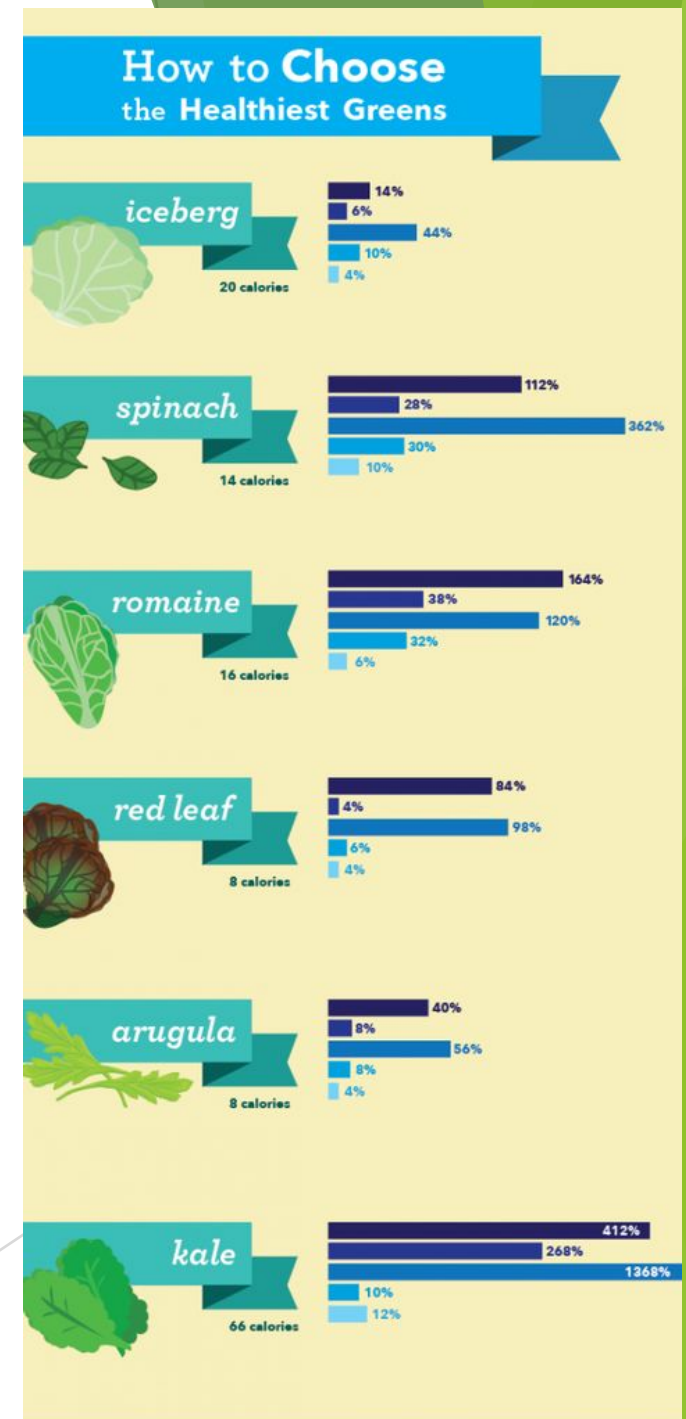
Natural - The term, “natural”, means that a product has nothing artificial or synthetic added.

Fresh - Food is unprocessed and has not been frozen or subjected to any form of thermal processing or any other form of preservation. NOTE: This definition still allows for wax coatings, post harvest use of approved pesticides, application of mild chlorine wash, and treatment with ionizing radiation.



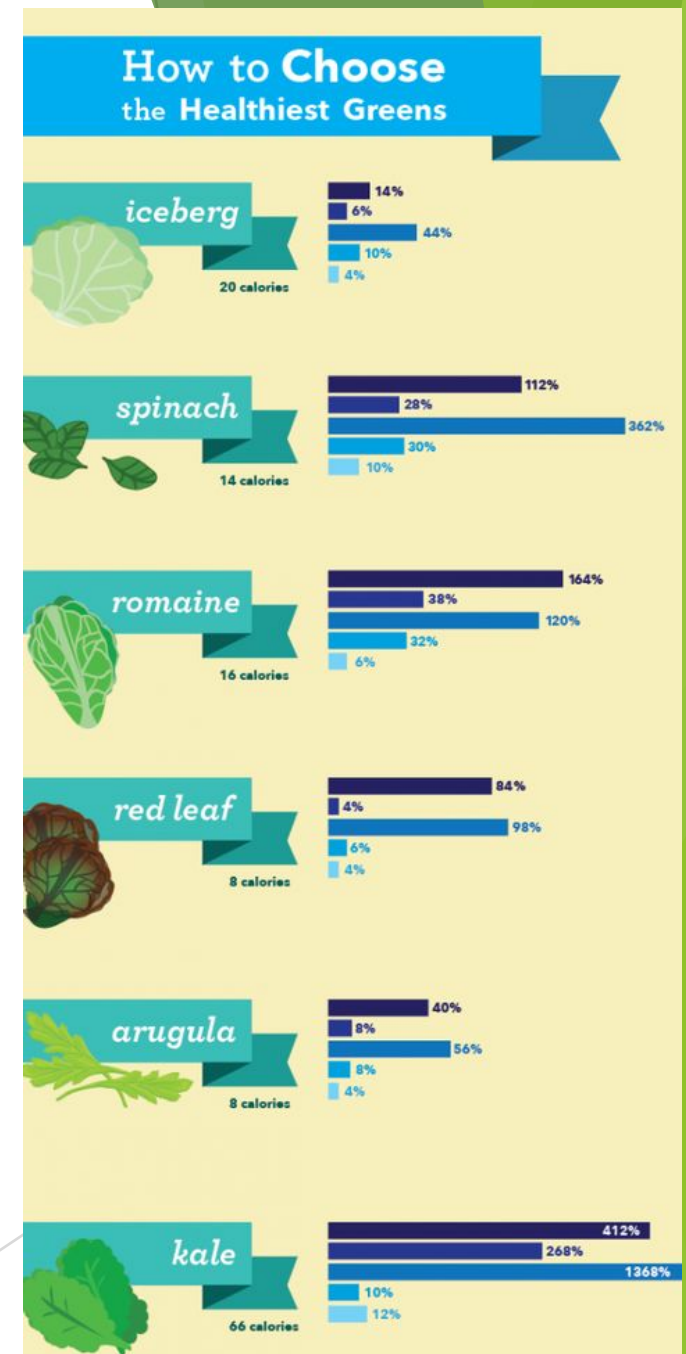
Nutritional facts

- ❖ Which types of lettuce pack the biggest nutritional punch?
- ❖ USDA recommends daily intake of 2-3 cups for most adults.
- ❖ A bowl of leaves is stellar source of vitamins A, C, K, and folate, plus essential nutrients at less than 10 calories per cup.
- ❖ America's favorite lettuce, iceberg, ranks the lowest in nutritional value across the board (at 96% water content).
- ❖ Spinach boasts nearly twice the recommended daily value of vitamin K, half the recommended value of vitamin A, and ample amounts of calcium and iron.



Most nutritious greens

- ❖ Research shows darker “loose” or “open leaf” lettuces (romaine, red leaf, and butter head) contain more antioxidants and nutrients than lighter-colored, tightly-packed iceberg.
- ❖ Darker leaves are able to absorb more light and, synthesize more vitamins. Tops and outer leaves are more nutritious.
- ❖ Darker and healthier greens with tougher roughage like Swiss Chard and Kale, beat out even Spinach in antioxidants.
- ❖ Tips: Give leaves a good cold rinse before serving raw, boiled, or steamed, as the folds in these greens accumulate dirt
- ❖ High heat can strip veggies of their natural vitamin content.
- ❖ Hold off on creamy dressings, croutons, bacon bits, and layers of shredded cheese. Use a lighter vinaigrette and chopped walnuts or sunflower seeds for added crunch and protein.



Greens nutritional facts

1 CUP	CALORIES	FIBER (G)	VITAMIN A (IU)	IRON (MG)	POTASSIUM (MG)	FOLATE (MCG)
Your RDI (to compare)	Around 2,000	25-30	2,333	18	4,200	400
Arugula	4	0	474	0.2	73.8	19.4
Beet Greens	8	1	2,404	1	290	5.7
Bibb Lettuce	7	1	1,822	0.7	131	40.1
Green-Leaf Lettuce	5	0	2,665	0.3	69.8	13.7
Iceberg Lettuce	10	1	361	0.3	102	21
Kale	33	1	10,302	1.1	299	19.4
Mesclun/ Spring Mix	5	1	1,200	1.8	160	53
Red-Leaf Lettuce	4	0	2,098	0.3	52.4	10.1
Romaine	8	1	4,094	0.5	116	64
Spinach	7	0.7	2,813	0.8	167	58.2

Stephen's favorite healthy salad

Healthy salad ingredients:

- ❖ ½ head of Napa cabbage (chopped)
 - ❖ ½ head Red cabbage (chopped)
 - ❖ 1 bunch curly kale (chopped)
 - ❖ 1 bag slivered broccoli stems
 - ❖ 3 slivered carrots
1. Mix in a large bowl
 2. Can be kept a week in refrigerator
 3. Place handful in each salad bowl
 4. Use favorite salad dressing



Mustard salad dressing ingredients in equal parts:

- ❖ Miracle Whip or mayo or yogurt
 - ❖ Cider or Balsamic vinegar
 - ❖ Your favorite mustard or mustard blend
 - ❖ Brown sugar or molasses or honey
1. Whisk ingredients until smooth, refrigerate

What is on today's menu

Romaine, Bibb and Leafy Green lettuce

Wild Rocket Arugula

Dandelion Leaves

Herb Salad Mix

Nasturtium Leaves

Spinach

Tatsoi

Baby Watercress

French Sorrel

Recipes will be posted on dallasgardenbuzz.com



Garden greens resources

<http://www.dallascountymastergardeners.org/>

<http://aggie-horticulture.tamu.edu/>

<https://www.epicurious.com/ingredients/varieties-and-types-of-lettuce-article>

<https://www.popsugar.com/fitness/Leafy-Greens-Nutritional-Comparison-34113479>

<https://www.holistichelp.net/blog/list-carbs-in-vegetables/>

<https://www.nutrition-and-you.com/vegetable-nutrition.html>

<https://gotgreensrevolution.com/greens-nutrition-guide/>

<https://chopra.com/articles/7-leafy-greens-a-nutritional-comparison>

https://www.cdc.gov/pcd/issues/2014/13_0390.htm

<https://www.gardeningknowhow.com>

<https://www.everydayhealth.com/diet-nutrition-pictures/best-salad-greens-for-your-health.aspx#no-3-swiss-chard>

If you have a gardening question or need to schedule a speaker

Dallas County Master Gardeners

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Growing and Using Salad Greens

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PATH TO
THE PLATE

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