

# Kale



Green Curly Kale



Red Curly Kale



Dinosaur Kale



Hungry Gap



Red Russian

## Did You Know

- Celebrate National Kale Day this October! For more information visit [nationalkaleday.org](http://nationalkaleday.org).
- There are over 50 varieties of kale. Lacinato kale is also called dinosaur kale for its bumpy leaves. Please pass the dino salad! There are also ornamental varieties in many colors including white, pink, and purple.
- Kale becomes sweeter after experiencing a light frost.
- Kale has been grown for more than 6,000 years and is in the brassica family along with bok choy, collards, and broccoli.

## In the Garden

Kale is a fantastic addition to any Montana garden. A hardy vegetable, kale thrives in our climate and even becomes sweeter after a light frost. Plant seeds directly in garden or container five weeks before last frost to two weeks after last frost. For fall plantings, plant 6-8 weeks before forecasted first frost. Most varieties will do well in containers at least 8 inches wide and 8 inches deep.

## Selection

Buy kale with firm, bright leaves. Baby kale should have small, tender leaves with few stems. "Mature" kale will be 12-16 inches in length with stems and relatively small leaves. Kale stems can be bitter. Remove larger stems or use baby kale.

## Storage

Store in perforated plastic bag in refrigerator up to 5-10 days.

## Cooking

Wash greens thoroughly before using to remove any soil. Cooked kale reduces in size by 75-80% compared to fresh greens.

**Blanch or Boil.** Bring water to a boil, enough to cover the kale. Remove dried or thick stems and place the kale into the boiling water to blanch 5-8 minutes or until desired tenderness is reached.

**Braise.** Cut kale to desired size. Remove dried or thick stems. Drizzle cooking oil in a heated pan, add low-sodium seasonings if desired. Cook over low heat for about 20 minutes, or until desired tenderness is reached.

**Preserve.** For more information on preserving kale, read MontGuides Drying Vegetables and Freezing Vegetables. Visit <https://nutrition.msuextension.org/> and click on the food preservation link or contact your Extension office to find the guide.

**Roast.** Cut kale to desired size. Place on foil-lined baking sheet and drizzle with olive oil and low-sodium seasoning. Bake at 300°F for 12-15 minutes or until crispy.

**Salad.** Add raw kale to salads for added flavor, texture and visual appeal. Tenderness can be achieved by massaging finely cut greens with acidic dressing. Add in nuts, seeds or dried fruit for added flavor and texture.

**Sauté.** Cut kale to desired size. Remove dried or thick stems. Drizzle cooking oil in a heated pan, add low-sodium seasonings if desired. Cook by stirring over high heat until desired tenderness, about 5-8 minutes.

**Season.** To enhance flavor, season with basil, bay, celery seed, garlic, oregano, tarragon, or thyme.

**Soup or Entrée.** Add kale to soups and entrees, such as lasagna, quiche, or pizza.

**Steam.** Remove dried or thick stems. Place kale in a pan with a small amount of water and low-sodium seasonings. Cook on medium heat for 2-4 minutes, depending on size and age of greens, until desired tenderness.

Adapted from the Kale Food Fact Sheet developed by Montana State University Extension. For the full fact sheet and other resources, visit: <https://nutrition.msuextension.org/>.





## The Best Kale Chips in the World

HACCP Process:  1 – No Cook  2 – Cook & Same Day Serve  3 – Cook, Cool, Reheat, Serve  4 – SOP Controlled

Ingredients	6 Servings	25 Servings	Directions
Kale, raw, "chipped"	1 1/2 cups	6 1/4 cups	
Oil, olive, salad, or cooking	1 tsp	1 Tbsp	
Salt	1/4 tsp	1 tsp	<ol style="list-style-type: none"><li>1. Preheat oven to 225°F</li><li>2. Remove large stems from leaves leaving the kale in "chip-size" pieces.</li><li>3. In single layer on sheet tray, place leaves face up, lightly spray with olive oil, and lightly season the kale with the salt.</li><li>4. Bake for 40-60 minutes, or until the kale is completely dehydrated and will easily release from the pan when you shake the pan back and forth. Using a low oven temperature ensures that you will not burn the chips.</li></ol>

Serving Size	1/4 cup	Pan Size	Full sheet tray	Yield	6, 25 servings
Oven Temperature & Baking Time:	Conventional	Temperature	Minutes	Temperature	Minutes

Convection      220°F      40-60

**Meal Component Fulfillment** (Based on Serving Size) 1 Serving Provides:

- 1/4 cup vegetable

### Nutrition Analysis : Serving Size: 1/4 cup

16	Calories (kcal)	.13	Saturated Fat (g)	.29	Iron (mg)
.55	Protein (g)	54.62%	Calories from Total Fat (%)	22.69	Calcium (mg)
1.68	Carbohydrate (g)	2575.48	Vitamin A (IU)	117.74	Sodium (mg)
.96	Total Fat (g)	20.10	Vitamin C (mg)	.34	Dietary Fiber (g)

### Notes:

- If using convection or oven with forced air, place a second pan upside over the pan with the kale to prevent the chips from flying around the oven and burning.
- For more tips on how to make the best kale chips in the world, watch Edward's video at: <https://youtu.be/13ZmhyQJiU0>

Developed by: Edward Christensen, Assistant Food Service Manager, Missoula County Public Schools



## Rawesome Kale Salad

HACCP Process:  1 – No Cook  2 – Cook & Same Day Serve  3 – Cook, Cool, Reheat, Serve  4 – SOP Controlled

Ingredients	6 Servings	25 Servings	Directions
Kale, any variety, but Lacinato (Dinosaur) variety is especially tender	1/2 bunch	2 bunches	
Lemon juice	2 Tbsp	1/3 cup	
Minced garlic	1 clove	2 cloves	
Olive oil	2 Tbsp	1/2 cup	
Tahini* or peanut butter	1 1/2 Tbsp	1/2 cup	
Garbanzo beans, drained and rinsed	1 cup	4 cups	
Cayenne pepper	Pinch	Pinch	
Salt	Pinch	1/4 tsp	
Pepper	Pinch	1/4 tsp	

Serving Size 3/4 cup

Pan Size

Yield 6, 25 servings

### Oven Temperature &

### Baking Time:

Conventional

Temperature

Minutes

Temperature

Minutes

Convection

**Meal Component Fulfillment** (Based on Serving Size) 1 Serving Provides: • 1/4 cup dark green vegetable • 1/2 oz meat/meat alternate

### Nutrition Analysis : Serving Size: 3/4 cup

<u>92</u>	Calories (kcal)	<u>.88</u>	Saturated Fat (g)	<u>.95</u>	Iron (mg)
<u>2.53</u>	Protein (g)	<u>63.43%</u>	Calories from Total Fat (%)	<u>55.04</u>	Calcium (mg)
<u>7.17</u>	Carbohydrate (g)	<u>2050.50</u>	Vitamin A (IU)	<u>57.49</u>	Sodium (mg)
<u>6.45</u>	Total Fat (g)	<u>26.68</u>	Vitamin C (mg)	<u>1.64</u>	Dietary Fiber (g)

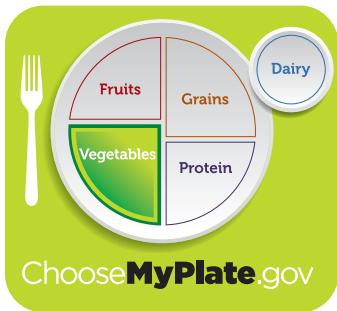
### Notes:

- \*The students absolutely love this recipe! The lemon juice makes the kale very tender, and the nutty flavor of the tahini helps make the bitterness of the kale more palatable to young children. If you have a nut-free kitchen and can't use tahini or peanut butter, try roasting some extra garbanzo beans and pureeing them with olive oil. It creates a similar texture to tahini and adds a nice nutty flavor without using any nut products.
- Nutrient analysis was conducted using tahini, rather than peanut butter. If using peanut butter the nutrient composition will be different.

Source: Project Bread ([www.projectbread.org/children-and-schools](http://www.projectbread.org/children-and-schools))

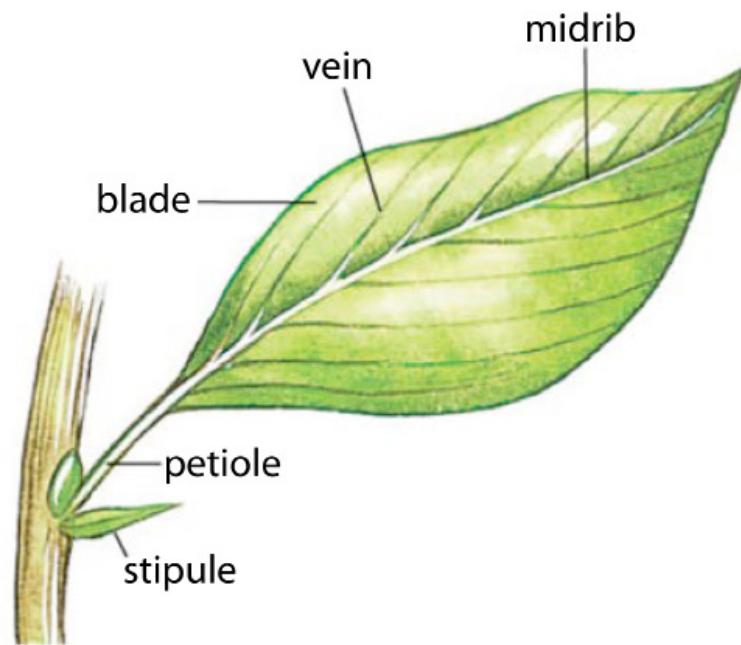
## Nutrition Information

Kale is packed full of nutrients. One cup of raw kale contains 684% of the recommended daily value of vitamin K, an essential nutrient that helps blood clotting. Kale is also an excellent source for vitamins A and C and provides calcium and iron. Calcium is necessary for building strong bones.



## Dig Deeper

For sources and photo credits along with more recipes, lessons, quick activities, resources, and guides, visit: [mtharvestofthemonth.org](http://mtharvestofthemonth.org).



### Notes:

#### 4 Montana Harvest of the Month: **Kale**



The Montana Harvest of the Month program showcases Montana grown foods in Montana communities. This program is a collaboration between Montana Farm to School, Office of Public Instruction, Montana Team Nutrition Program, National Center for Appropriate Technology, Montana State University Extension, Gallatin Valley Farm to School, FoodCorps Montana, and Montana Department of Agriculture. More information and resources are available at: [mtharvestofthemonth.org](http://mtharvestofthemonth.org).

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