

# WORDS THAT DESCRIBE

# KALE

FLAVOR • COLOR • TEXTURE

bitter

spinachy

spruce-green

frilly

hearty

peppery

woody

curly



earthy

tender

tough

leathery

sweet

cabbagey

sulfurous

black-green



Looking Back

# History

**Kale is a descendent of wild cabbage, native to Europe and Anatolia – the peninsula in westernmost Asia that constitutes the majority of modern-day Turkey. It was domesticated as early as 2000 BCE in the eastern Mediterranean. Before that, it's likely that ancestors of kale mostly were foraged for their oily seeds. It once was thought of as an undesirable vegetable mainly fed to cows.**



**What's in a Name?**

# **Brassica oleracea, aka...**

**Though kale and collards are different cultivars or subspecies, they are so closely related that they share the same botanical name. Both are part of the Acephala Group, a term from the Greek phrase for "without a head."**

**Around 1300, the word cale or cal appeared in Northern Middle English; Southern dialects used col. In Scotland, the word became kail or kale and was so central that it became a synonym for "food." Around 1902, "kale" became a slang term for money.**



**Maps, Migration, & Culture**

# **Around the World**

**In Scotland, kitchen gardens are called “kale yards,” because so much kale is grown in them, and, to be “off one’s kale” means to have a poor appetite. Kai-lan or Chinese kale is a cultivar often used in Chinese cuisine. In Portugal, the bumpy-leaved kale is mostly called “couve galega” (Galician kale or Portuguese cabbage). Sea kale (*Crambe maritima*), native to the seashores of England and Ireland and popular in Victorian England, once was grown as a substitute for asparagus.**

English, Scottish, and Irish colonists brought curly kale varieties in the late 1500s or early 1600s.

Cold-hardy Siberian kale was introduced to Canada by Russian traders in the 1800s, around the same time that Italian immigrants to the US introduced Tuscan (lacinato) kale. In the early 1900s, USDA botanist David Fairchild brought plants from Croatia.



**The Spoken Word  
Google Translates**

# Words for Kale

**Latin:** Caulis

**Arabic:** دعجمل ا بنركلا

**Cantonese:** 羽衣甘藍

**French:** Chou Frisé

**Haitian Creole:** Chou Frize

**Hindi:** केल

**Italian:** Cavolo

**German:** Grünkohl

**Japanese:** ケール

**Kurdish:** Kale

**Persian:** چى پ م لک

**Spanish:** Col Rizada

**Swahili:** Kale

**Ukrainian:** листова капуста



**Heart & Soul**

# **Art & Literature**

**Billboard: “More sensational than Beyonce’s surprise ‘7/11’ music video drop in 2014 was the Kale sweatshirt fashion trend it inspired.”  
Urban Outfitters, Nordstrom and Macy’s sold out of the popular sweatshirt multiple times over.”**

“I ordered the salad. It arrived as a shadowy green mountain under a blizzard of grated pecorino Rossellino cheese (a nutty Italian sheep’s milk cheese with a ruddy rind) and bread crumbs, flavored with lemon and chili. Tangy, spicy, slick with good oil and crunchy from the earthy-flavored kale, it was as pungent and rich as it was fresh and clean tasting; a veritable raw foods epiphany. The minute I left the restaurant I craved another.”

— Melissa Clark, “A Good Appetite,”  
The New York Times, 2007

**KALE**



**A Closer Look**

# Botany

**Leaves grow from the central stem of kale plants. Leaf colors range from light green to green, blue-green, dark green, violet-green, and violet-brown, with textures from smooth to curly and or bumpy. Kale is a cool-weather biennial plant that can survive temperatures as low as -15F. Some varieties are tolerant of salt; in the early 1900s, specimens were used in Croatia (then part of the Austria-Hungary Empire) to desalinate soil.**



**Ripe for the Picking**

# Season's Best

**The Garden State has a spring harvest of kale from mid-April through mid-June, and a fall harvest from September through November, though in home gardens, kale often can be harvested throughout the year. Like collards, kale leaves can become sweeter after a frost.**



**Soil & Sun & Water**

# **In the Garden**

**Plant kale in early spring (late March to April) for a summer harvest, or in mid-July to late August for a fall/winter harvest. Grow kale in full sun to part-shade, ideally rich in loamy, well-drained soil.**

**Companion/guild plantings: Garlic, onions, chives, leeks, beans and peas, radishes, dill, rosemary, sage, cilantro, marigolds, and nasturtiums.**

In addition to well-known varieties - curly, lacinato, Russian (red or white), kale varieties include asparagus or sea kale and kale-rape (from crossing kale and forage rape (*Brassica napus*), also called "hungry gap" after the period in winter when little else could be harvested.



By The Numbers

# Math & Money

**The Garden State consistently ranks in the top 10, nationally, for kale production. In 2024, New Jersey harvested approximately 870 acres of kale, worth about \$3.9 million. Cumberland County is the fourth-largest kale growing county in the US; most other NJ kale is grown in southernmost counties of Salem, Gloucester, and Atlantic. Local farmers often consider it a "main crop" for community-supported agriculture and farmers' markets.**



**Kale &...**

# **Ingredient Pairings**

**Kale often is an appreciated addition to salads, soups, pasta, grains, main dishes, and smoothies. For a simple side, blanch, then saute with onions and garlic; salt to taste and add a splash of red wine vinegar. Add chopped kale to almost any bean, legume, or meat stew.**

## **FLAVORINGS THAT GO WELL WITH KALE**

bay leaf • red bell peppers • cheddar • roasted chicken  
garlic • ginger • lemon • nutmeg • onions • oregano  
pancetta • parmesan • pork • potatoes • red pepper flakes  
sausage • shallots • sour cream • sweet potatoes • thyme  
tomatoes • red wine vinegar



## Senses & Physiology

# In the Kitchen

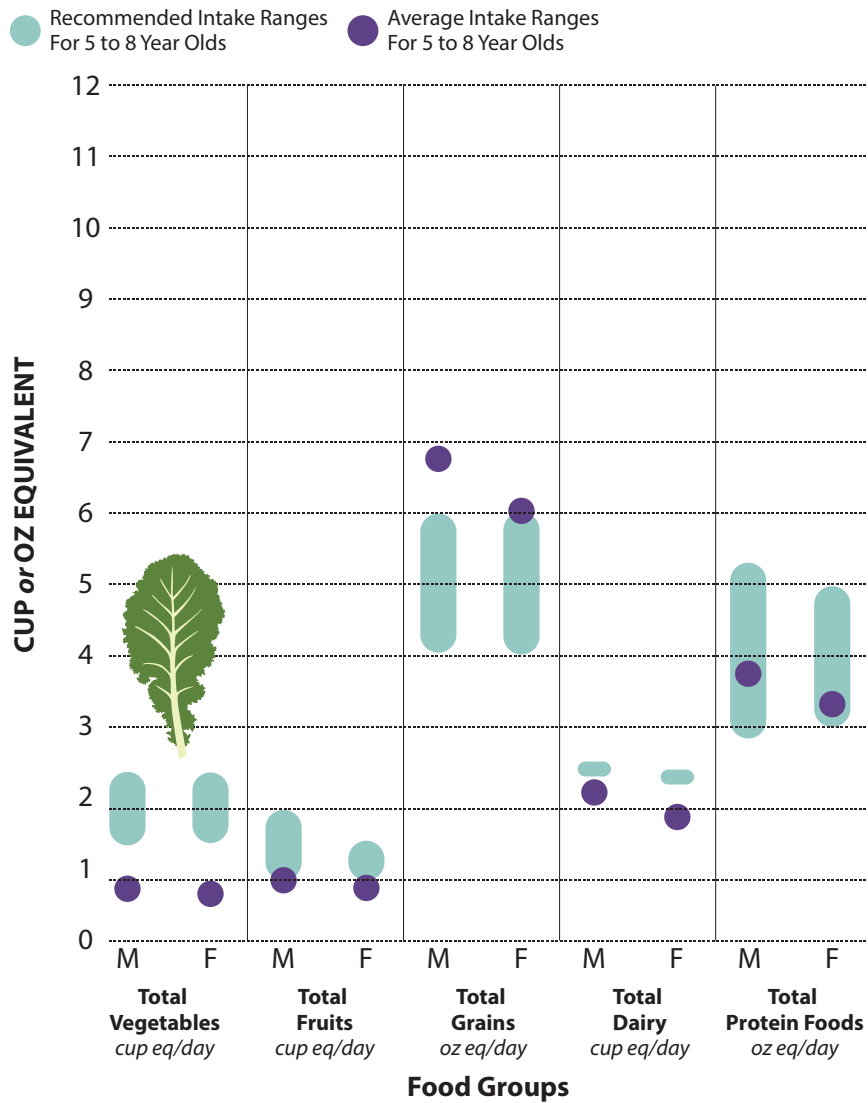
**To prepare, check both sides of each kale leaf individually and hold under running water. Move your fingers through each fold and crevice to remove any excess dirt or any caterpillar. Fold the two sides of the leaf together lengthwise, then cut the stem away from the leaf with a sharp knife. Save stems for juicing, pesto, sautéing or vegetable stock. If not blanching, finely chop before adding to stir-fry, pastas and soups.**



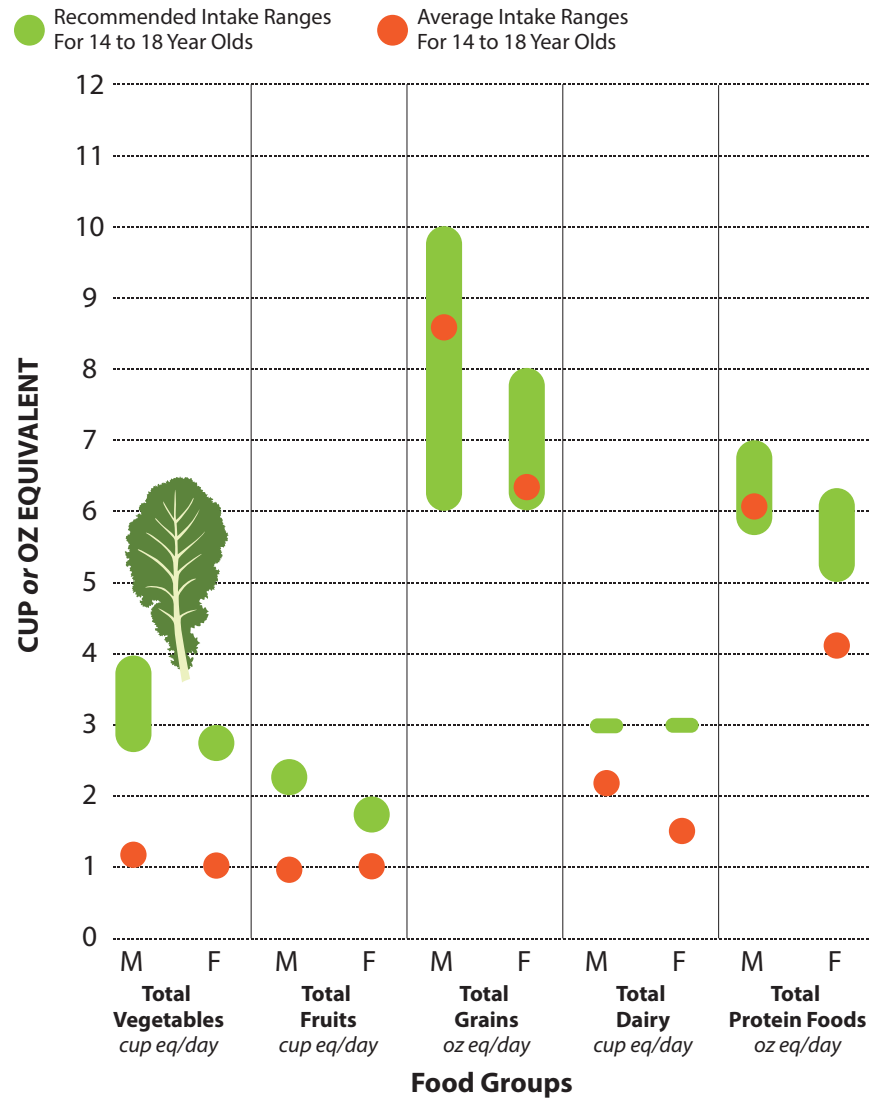
## Nutrition for Body & Mind

# Fuel for Learning & Powerful Play

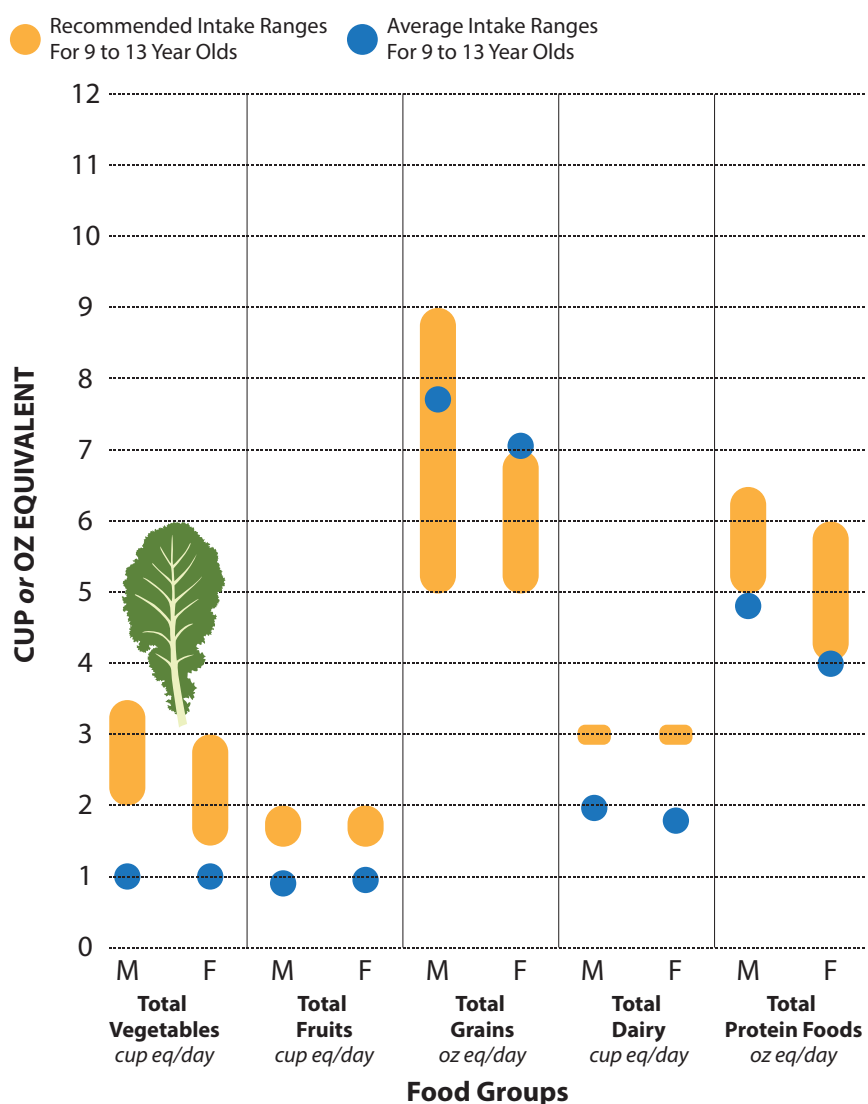
### Current Intakes: Ages 5 Through 8



### Current Intakes: Ages 14 Through 18



### Current Intakes: Ages 9 Through 13



**Kale is a good source of protein, and is rich in vitamins A, C, and K, along with calcium, fiber, magnesium, folate, potassium, omega 3 fatty acids and carotenoids.**



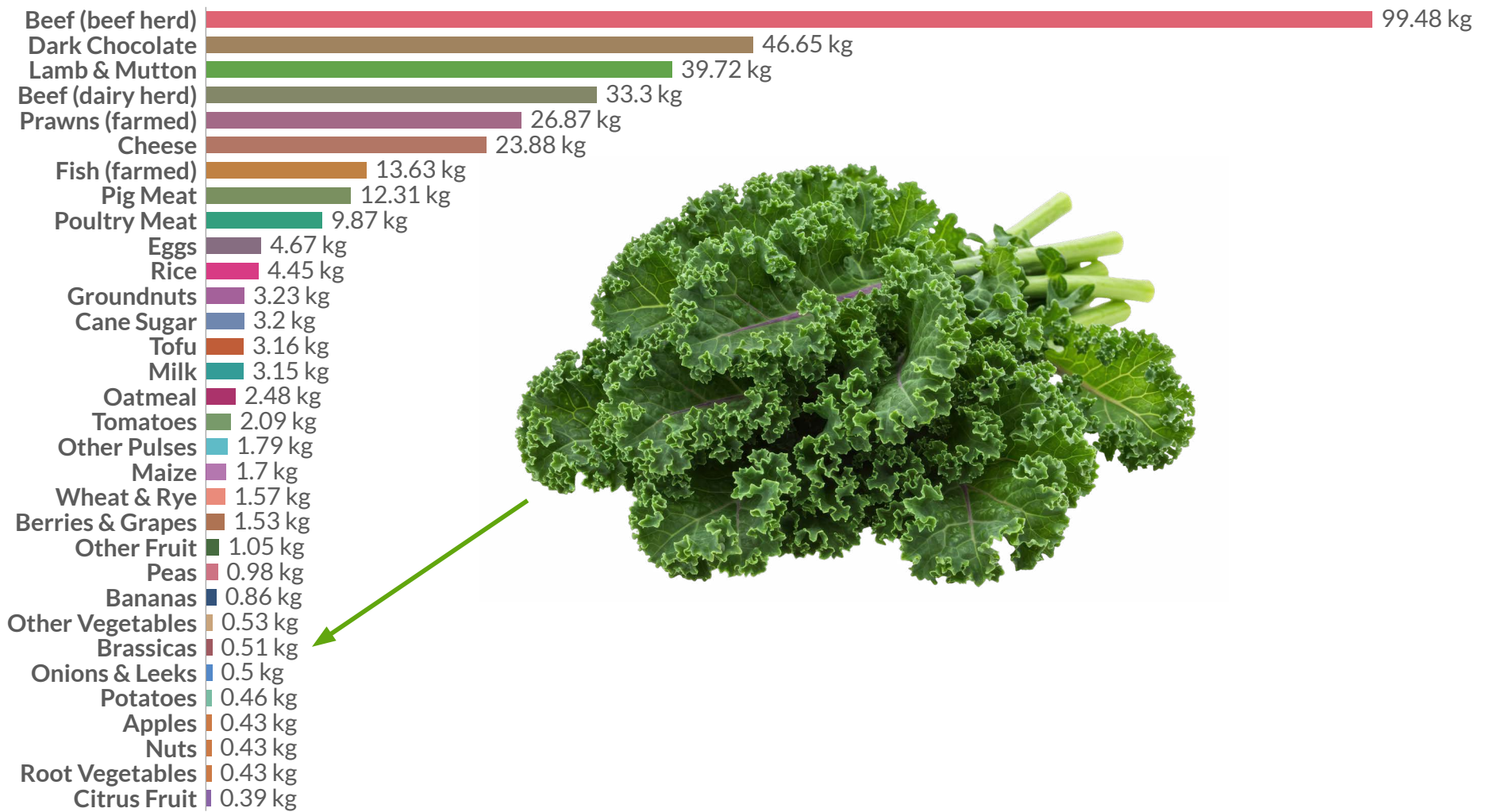
# CLIMATE IMPACT OF KALE

ONLY THOSE GROWN LOCALLY AND SEASONALLY

## Greenhouse gas emissions per kilogram of food product

Our World  
in Data

Greenhouse gas emissions<sup>1</sup> are measured in kilograms of carbon dioxide-equivalents<sup>2</sup>. This means non-CO<sub>2</sub> gases are weighted by the amount of warming they cause over a 100-year timescale.



https://ourworldindata.org/environmental-impacts-of-food

Data source: Poore and Nemecek (2018)

OurWorldinData.org/environmental-impacts-of-food | CC BY

**Carbon emissions for growing brassicas are relatively low, if grown outdoors and in season and with organic practices. Conventionally grown kale is frequently cited for high pesticide residues, often ranking on the Environmental Working Group's "Dirty Dozen" list. Electricity—primarily for LED lighting and climate control—is the largest contributor to emissions in indoor farms.**

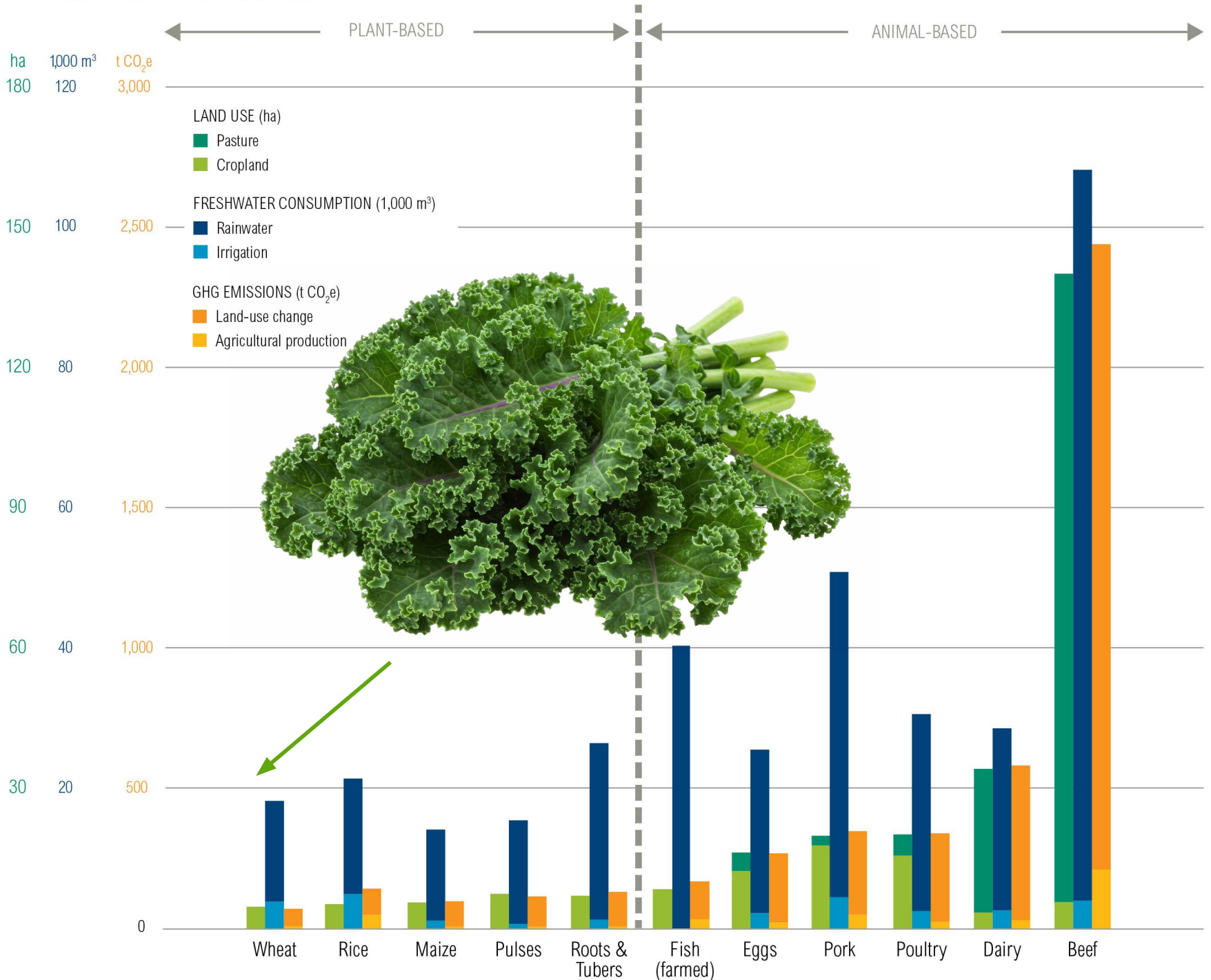


# RESOURCE INTENSITY OF KALE

ONLY THOSE GROWN LOCALLY AND SEASONALLY

Animal-Based Foods Are More Resource-Intensive than Plant-Based Foods

PER TON PROTEIN CONSUMED



wri.org/shiftingdiets

WORLD RESOURCES INSTITUTE

**Kale has a high water content (90–91%) and a shallow root system, making it prone to drying out without consistent moisture.**

**The greatest emissions are caused by the conversion of land, the continued use of that land rather than reforestation, and by processes on the farm.**



## Garden State on Your Plate

# Kale Tasting

**Begin with unseasoned raw/sauteed/massaged kale. Then season with a pinch of salt. After observing how seasoning changes the flavor, taste with a drizzle of vinaigrette. If available, compare and contrast different methods of cooking beyond roasting: Steamed, boiled, sauteed, and with relevant flavorings.**

### Prepping Kale for Salad

Place torn or cut leaves in a large bowl. Add 1-2 tablespoons of olive oil and about ½ teaspoon salt. Using your hands, firmly rub, squeeze, and knead the leaves together for 1-3 minutes, or until leaves are dark, soft, and fragrant.

### Vinaigrette

*This seasoning mix can be used to bathe vegetables before roasting, as a seasoning for braising or simmering, and for dressing salads of fresh greens.*

*Use a ⅓ to ⅔ ratio, lemon juice (or vinegar) to oil.*

### Vinaigrette

⅓ cup lemon juice

⅔ cup olive oil

1-2 garlic cloves, crushed

½ teaspoon dijon mustard

Salt

Freshly ground black pepper

Place ingredients in a jar with a tight-fitting lid.

Shake to combine.

Store in refrigerator.



# Credits

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Garden State on Your Plate is a K12 program that uses local produce, school cafeterias, campus lands, and student demographics to illustrate and amplify curriculum. The program, designed to elevate the everyday quality of school foods and to increase participation in the National School Lunch Program, was created in 2010 by the Princeton School Gardens Cooperative in partnership with Princeton Public Schools, and with funding from the Robert Wood Johnson Foundation.



[psgcoop.org](http://psgcoop.org)