

WORDS THAT DESCRIBE **SWEET POTATOES**

FLAVOR • COLOR • TEXTURE



GARDEN STATE ON YOUR PLATESM IS A PROJECT OF THE PRINCETON SCHOOL GARDENS COOPERATIVE, PRINCETON PUBLIC SCHOOLS, AND POMPTONIAN FOOD SERVICE, WITH GENEROUS SUPPORT FROM BENT SPOON, WHOLE EARTH CENTER, LILLIPIES BAKERY, AND CHURCH & DWIGHT EMPLOYEE GIVING FUND.

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Looking Back

History

Earliest cultivation records of the sweet potato date to 750 BCE in Peru, although archaeological evidence shows cultivation of the sweet potato might have begun around 2500-1850 BCE. By the time Columbus arrived in the 'New World' in the late 15th century, sweet potatoes were well established as food plants in South and Central America.



What's in a Name?

Ipomoea batatas, aka...

Call them lunch, call them dinner, call them a snack, call them dessert, but don't call them yams! Yams are members of the genus Dioscorea and are in their own special family, Dioscoreaceae. Yams can grow as long as 7 feet and can weigh up to 150 pounds. Sweet potatoes are usually the size of a potato. Yams are primarily grown in West Africa, with Nigeria leading the way in production.



Around the World

Tracing the history of agricultural products is one way scientists track the migration of people before written records. But the path of the sweet potato is mysterious.

Carl Zimmer writes in the NYT:

"Indigenous people of Central and South America grew it on farms for generations, and Europeans discovered it when Christopher Columbus arrived in the Caribbean.

In the 18th century, however, Captain Cook stumbled across sweet potatoes again - over 4,000 miles away, on remote Polynesian islands. European explorers later found them elsewhere in the Pacific, from Hawaii to New Guinea.

How could sweet potatoes arise from a wild ancestor and then wind up scattered across such a wide range? A 2018 analysis of sweet potato DNA offers a controversial conclusion:

Only one wild plant is the ancestor of all sweet potatoes."



The Spoken Word
Google Translates
Words for
Sweet Potato

Emoji: 🍠

Latin: dulce annuum

Arabic: ةولحل اطا طبلا

Cantonese: 紅薯

Chinese: 甘薯

French: patate douce

German: süßkartoffeln

Haitian Creole: pòm detè dous

Hindi: शकरकंद

Japanese: サツマイモ

Persian: نیری ش ینی مز بیس

Spanish: batata

Swahili viazi vitamu

Ukrainian: батат

Archaeologists have found prehistoric remnants of sweet potato in Polynesia. Hypothesis: Those samples came from western South America. Among the clues: One Polynesian word for sweet potato — "kuumala" — resembles "kumara," or "cumal," the words for the vegetable in Quechua, an Andes language.



Heart & Soul

Art & Literature

**Saul Botier and Kristina Billan write:
"The Maori of New Zealand story is that the sweet potato, or kumara, was a gift from the gods. In Chinese folklore, it's said that one sweet potato vine can feed a village. In Japan, sweet potatoes were introduced during a time of scarcity & became known as 'life-saving potatoes'...In some Eastern philosophies, the sweet potato serves as a metaphor for the human soul. Just as it grows unseen underground, developing its sweetness in darkness, so too does the soul grow through unseen struggles and challenges."**



Van Gogh's "Still Life with Potatoes" (winter 1886-87) features a collection of white potatoes and sweet potatoes



A Closer Look

Botany

Sweet potatoes (*Ipomoea batatas*) are the root of a vine in the morning glory family. The edible roots are true roots, like carrots or beets. The young shoots/stems are usually long and also are eaten as a green.

There are hundreds of sweet potato varieties, each with a unique flavor and texture, and five basic types: Orange skin with orange flesh, red skin with orange flesh, yellow skin with white flesh, purple skin with white flesh, purple skin with purple flesh.



Ripe for the Picking

Season's Best

Sweet potatoes are harvested by hand from late August through November. They are then cured for about 10 days so that sugars develop in the flesh and to allow the delicate skin to mature for storage. Sweet potatoes generally can be stored for up to a year.



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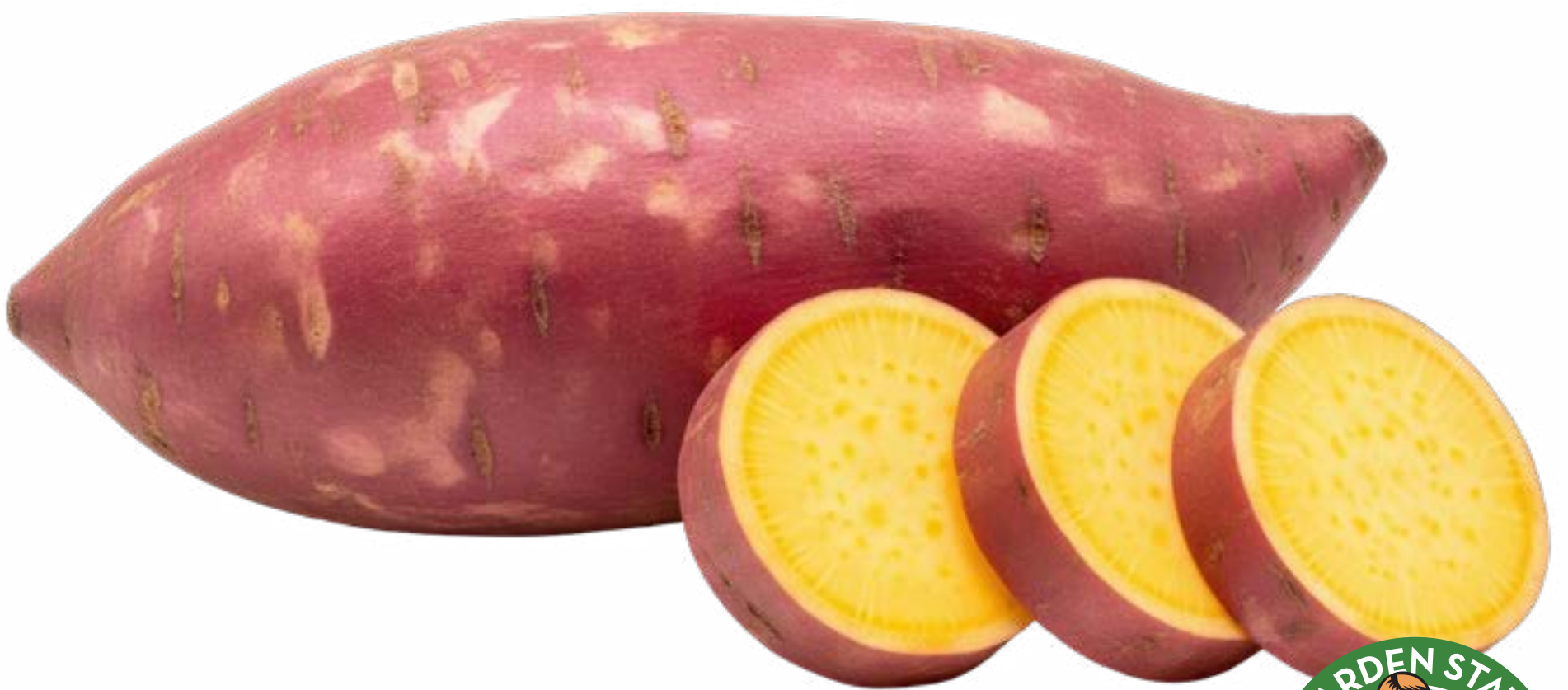
Soil & Sun & Water

In the Garden

Sweet potatoes grow from slips (or rooted sprouts). Plant 2–3 weeks after last frost, once the soil reaches 65°F or warmer. Hot days and warm nights are ideal for sweet potato production. They are drought- and heat-tolerant and have few pests or diseases.

Plant in loose, well-drained, and slightly acidic (~pH 6.5) soil. Good varieties for New Jersey include Beauregard, Bayou Belle, Red Japanese, Covington, and the Jersey White.

Companion plants: beans, borage, chives,
corn, lettuces, peas



By The Numbers

Math

& Money

Sweet potato is the seventh most important food crop and the fifth essential crop in the world. China, Nigeria and Tanzania are global production leaders. China consumes more than 80 percent of sweet potatoes. In the US, North Carolina, California, Mississippi, Louisiana and Georgia are top producers. Most of New Jersey's sweet potato acreage is in southern New Jersey, in and around Salem and Gloucester counties. Farmers in Ocean County, NJ, were the first to offer sweet potato seedlings for sale in 1922.



In the Kitchen

**Store sweet potatoes in a cool,
dark, dry environment.**

**Don't remove the skin when baking or
roasting sweet potatoes. Sweet potato
skin is high in fiber and a good source of
antioxidants. Just rinse the skin
and rub to remove any dirt.**

**Bake sweet potatoes, either whole or halved
(before baking, insert the tip of a sharp knife
about an inch into the potato to allow for
steam release). Or cut them into slices or
wedges, toss in olive oil, season, and roast
until the flesh is soft and caramelized.**

Sweet Potato Pie

"Before you had sweet potato pie, you had something called sweet potato pound, which is a corruption of the Native American word for a type of baked bread,' writes Adrian Miller, in "Soul Food: The Surprising Story of An American Cuisine,' '[Enslaved people] asking for dessert were eating roasted sweet potatoes cooked in the embers of a fire or they started eating mashed up sweet potatoes that were spiced. As [they] got access to cooking technology and equipment, like ovens, that's when they started to add pie shells'."



Sweet Potatoes &...

Ingredient Pairings

Sweet potatoes pair well with apples, prunes, coconut, collard greens, mustard greens, cranberries, kale, black beans, chickpeas, red lentils, peppers, corn, brussels sprouts, tofu, and onions, as well as pork, feta, gruyere, cheddar, and plain Greek yogurt, walnuts, and pecans.

INGREDIENTS THAT GO WELL WITH SWEET POTATO

allspice • apple cider • bay leaf • black pepper • brown sugar • butter • cardamom • cilantro • cinnamon • coriander • cream • curry • garlic • ginger • honey • lemon • lime juice • maple syrup • mint • molasses • nutmeg • olive oil • oranges • parsley • pecans • red bell peppers • red onion • sesame oil • thyme



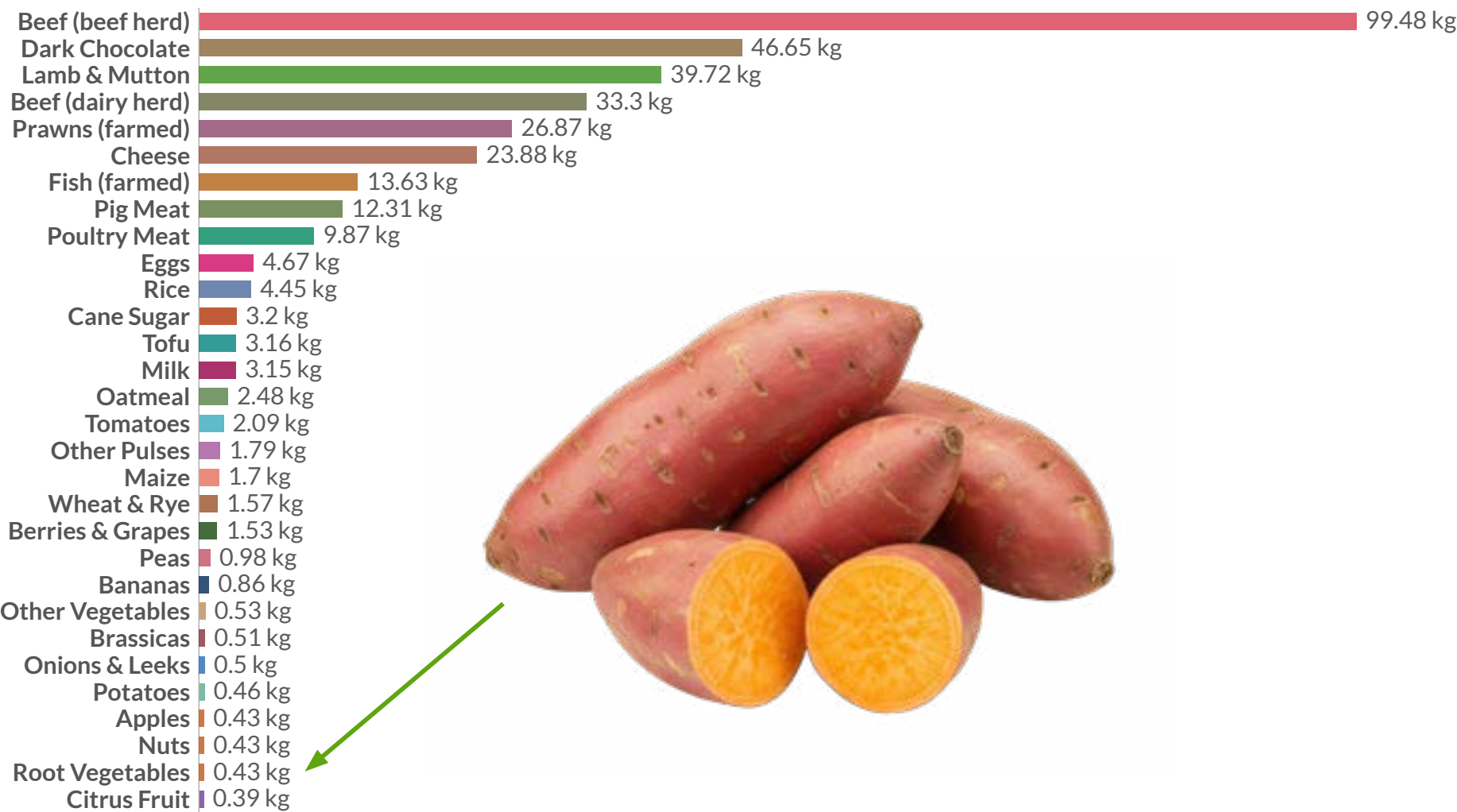
CLIMATE IMPACT OF SWEET POTATOES

ONLY THOSE GROWN LOCALLY AND SEASONALLY

Greenhouse gas emissions per kilogram of food product

Our World
in Data

Greenhouse gas emissions¹ are measured in kilograms of carbon dioxide-equivalents². This means non-CO₂ gases are weighted by the amount of warming they cause over a 100-year timescale.



Data source: Poore and Nemecek (2018)

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

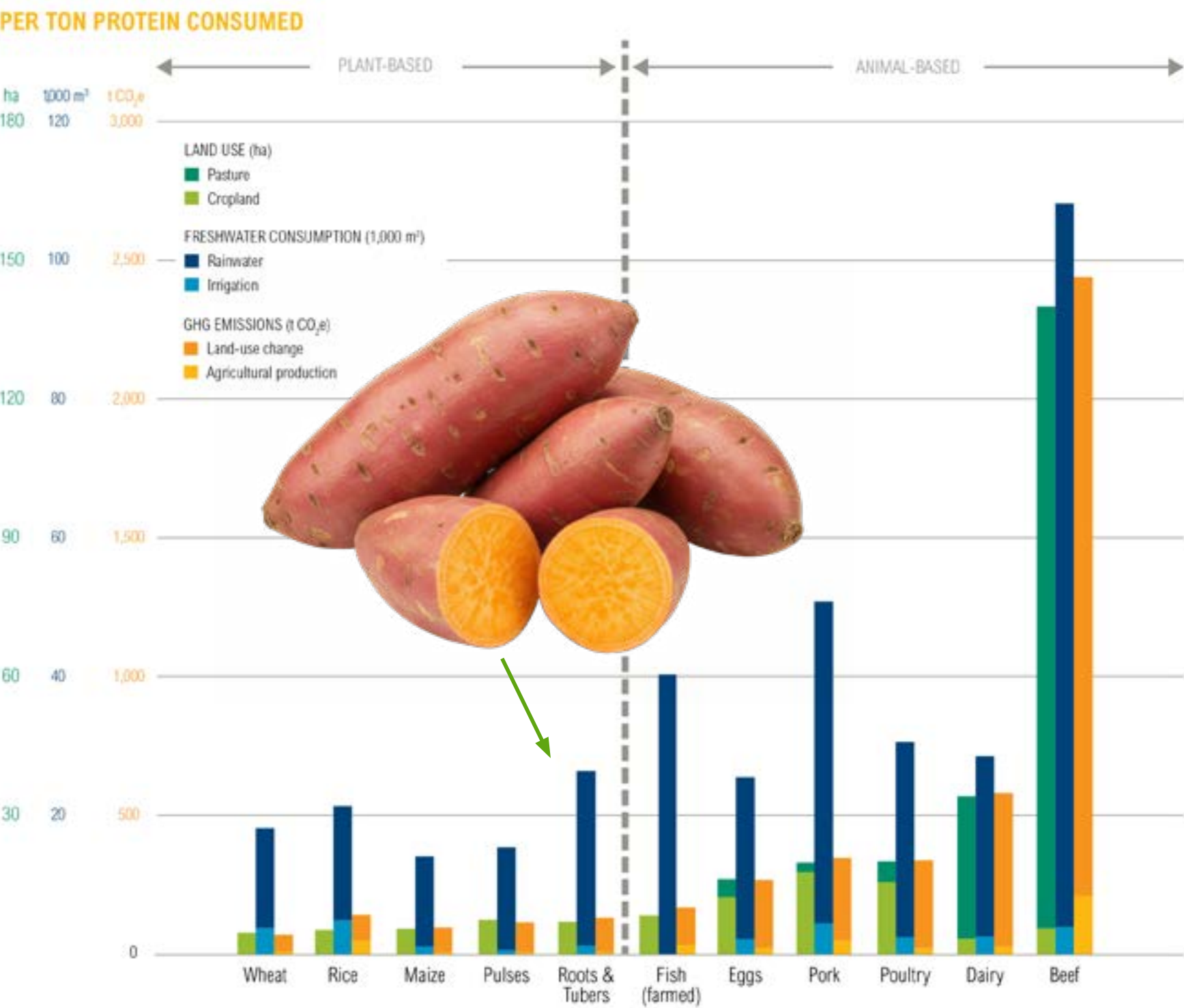
If possible, buy sweet potatoes from small farms, since most use less machinery and therefore less diesel fuel. Fertilizer is a contributor to GHG emissions for sweet potatoes. Sweet potatoes produce less than half of the carbon emissions of lettuce, and ten times less carbon emissions than cucumber. Fewer than 60% of sweet potato samples tested by the USDA contained any pesticides residues, compared to the 94% of samples for potatoes.



RESOURCE INTENSITY OF SWEET POTATOES

ONLY THOSE GROWN LOCALLY AND SEASONALLY

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



wri.org/shiftingdiets

WORLD RESOURCES INSTITUTE

<https://www.wri.org/data/animal-based-foods-are-more-resource-intensive-plant-based-foods>

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Garden State on Your Plate

Sweet Potato Tasting

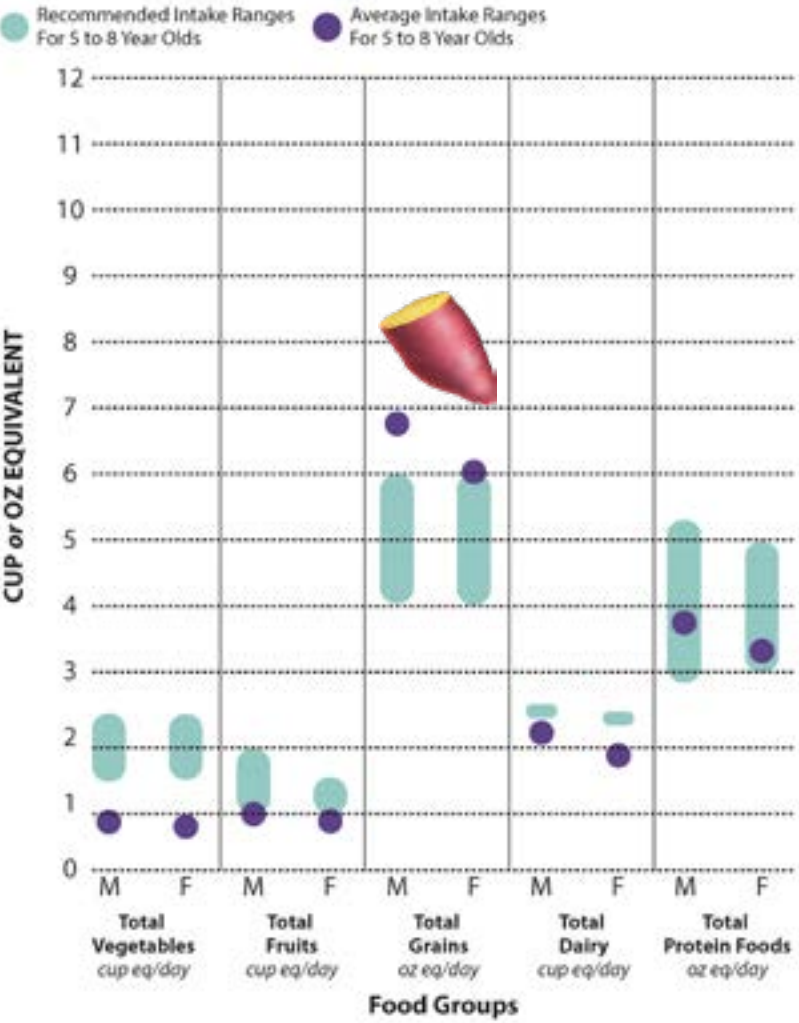
To conduct your own Garden State on Your Plate Sweet Potato Tasting, begin by tasting a thin slice of raw sweet potato. Note the texture and flavor. Then taste the same sweet potato cooked in two different ways—steamed (and then mashed), and roasted. Next, season the cooked sweet potatoes with salt and a squeeze of juice from a fresh orange or lime. Note how cooking and seasoning change the texture and flavor of sweet potatoes. Consider other spices that could be used on sweet potatoes.



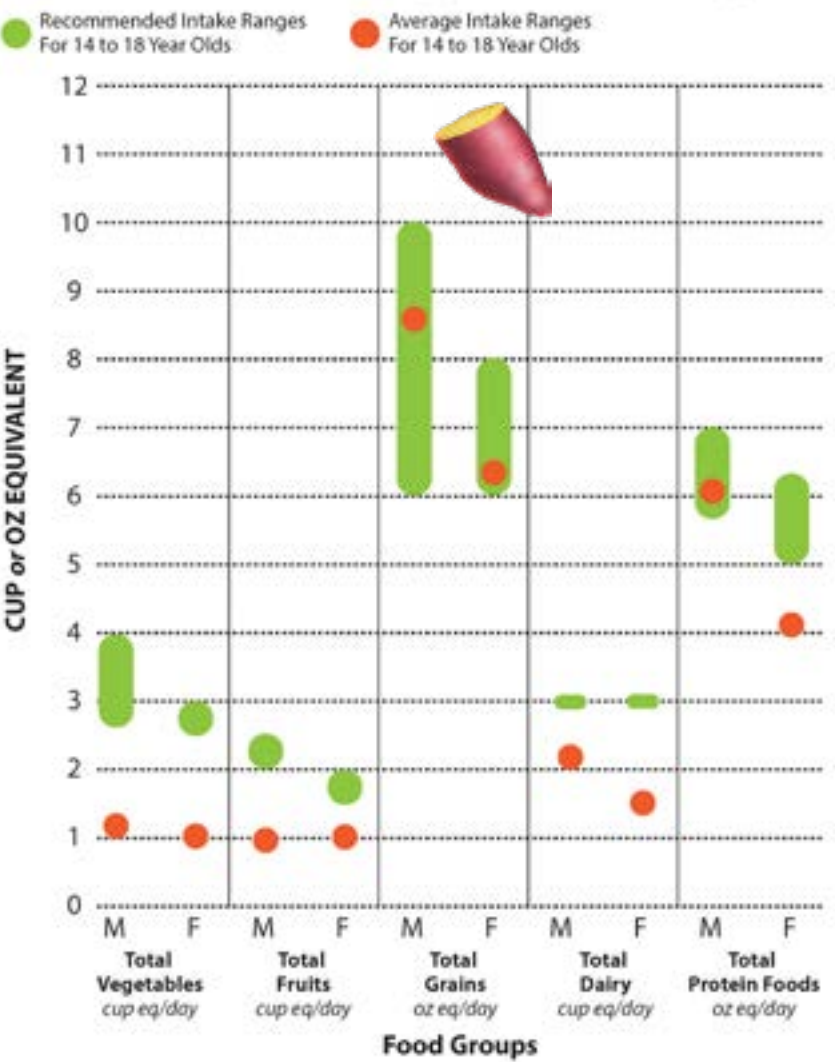
Nutrition for Body & Mind

Fuel for Learning & Powerful Play

Current Intakes: Ages 5 Through 8

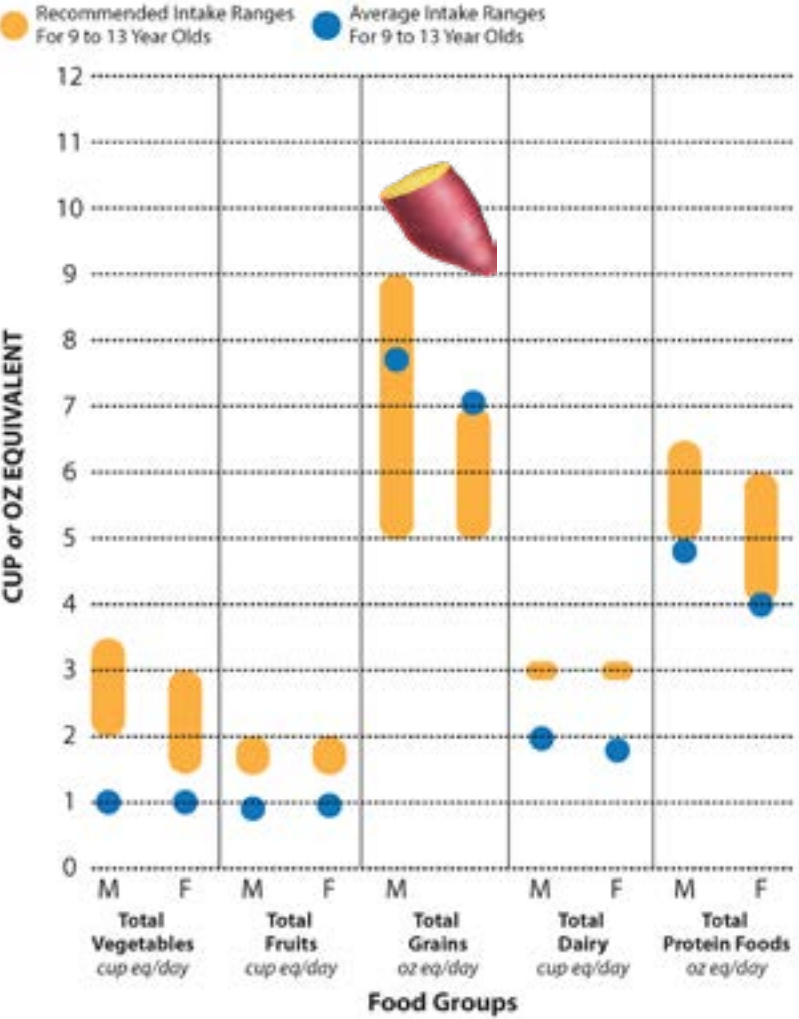


Current Intakes: Ages 14 Through 18



<https://www.dietaryguidelines.gov/>

Current Intakes: Ages 9 Through 13



Sweet potatoes contain 327% of the recommended daily intake of vitamin A, which is more than any other vegetable. Vitamin A is important for cell growth and development, fighting disease and good vision. Sweet potatoes also are high in fiber, and help balance gut microbiota.



Credits

<https://www.britannica.com/story/whats-the-difference-between-sweet-potatoes-and-yams>

https://blogs.loc.gov/inside_adams/2010/11/a-sweet-potato-history/

<https://www.ewg.org/foodnews/potatoes.php>

<https://impactful.ninja/what-is-the-carbon-footprint-of-sweet-potatoes/>

<https://www.cspi.org/article/what-foods-create-most-least-greenhouse-gas-emissions>

<https://www.npr.org/sections/thesalt/2013/01/22/169980441/how-the-sweet-potato-crossed-the-pacific-before-columbus>

<https://www.serious-eats.com/a-field-guide-to-sweet-potato-varieties-and-the-dirt-on-yams>

<https://www.groworganic.com/blogs/articles/planting-and-growing-sweet-potatoes>

https://timesmachine.nytimes.com/timesmachine/1922/08/22/99059195.pdf?pdf_redirect=true&ip=0

<https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/sweet-potato>

<https://njaes.rutgers.edu/SSHW/message/message.php?p=Health&m=1508>

<https://www.nytimes.com/2018/04/12/science/sweet-potato-pacific-dna.html>

<https://www.brepolsonline.net/doi/10.1484/J.FOOD.5.134741?mobileUi=0>

<https://www.savorysuitcase.com/sweet-potato-in-literature-and-art/>

<https://www.muzzarellifarms.com>

https://www.nj.gov/agriculture/farmtoschool/documents/Jersey%20Tastes!%20Recipes%20Cards/_Jersey%20Tastes!%20Activity%20Sheets%20%20Sweet%20Potatoes.pdf

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