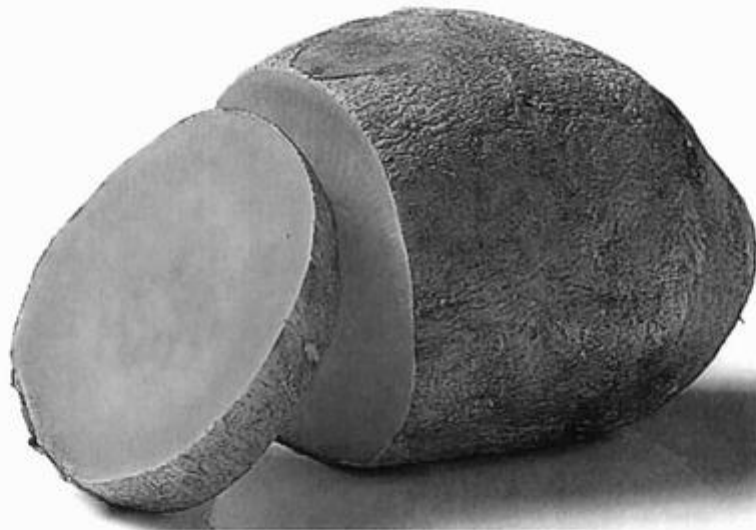




Sweet Potatoes



A Super Food

**Developed for Oregon FCE by Glenna Maine
District VII Director June, 2011**

HISTORY OF THE SWEET POTATO

How many think that sweet potatoes and Yams are the same? How many feel that they're different? Well they are different. This is what I hope this lesson will show you.

Yams are long (up to several feet) and cylindrical and rough, brown scaly skin.

Real yams hail from the Dioscorea family of perennial herbaceous vines and include dozens of varieties, some of which grow to over eight feet long and weigh nearly two hundred pounds



Sweet Potatoes are engorged plant storage roots. They are members of the morning glory family, Convolvulaceae are dicotyledons (or "Picots" for short, with the prefix "di" referring to the fact that they have two embryonic seed leaves) and are known by the scientific name (*Ipomoea batatas*)

There is a lot of confusion between what is a sweet potato and what is a Yam. Unless what you're buying in your supermarket is canned and say "Yams" or is a big, big chunk or root cut off a bigger root and wrapped in plastic, then what you're buying is a sweet potato, no matter what the sign posted on the vegetable counter says. To prevent confusion, the United States Department of Agriculture requires that sweet potatoes labeled as "Yams" also be labeled as sweet potatoes.

The sweet potato skin color can range from white to yellow, red, purple or brown. The flesh also ranges in color from white to yellow, orange or orange red. . There are two types of sweet potatoes, often described as "dry-fleshed" or "moist-fleshed." This refers to the mouth feel, not the actual moisture present in the root. Actually, soft versus firm fleshed types would be a more accurate description. "Moist-fleshed" types tend to convert more of their starch to sugars and dextrin's during cooking, becoming softer and sweeter than the "dry-fleshed" types. The "moist-fleshed" types are often called "yams" in the United States

Christopher Columbus found the natives of Central America cultivating sweet potatoes. Spanish explorers brought the sweet potato to Spain, where it was being grown by the middle of the 1500s, as well as the tropical areas such as the Philippines, India and China.

Sweet Potatoes are mentioned as one of the cultivated products of Virginia in 1648, perhaps in 1610 and are mentioned again by Jefferson, 1781. Sweet potatoes were said to have been introduced into New England in 1764. At the present day sweet potatoes are quite generally cultivated in tropical and subtropical countries, as in Africa from Zanzibar to Egypt, in India, China, Japan, New Zealand, the Pacific Islands, tropical America, and southern United States as far north as New York.

Of the large number of varieties of the sweet potato there are not more than 10 that are now of great commercial importance in the United States. China is the largest grower of sweet potatoes, providing about 80% of the world supply. Historically, most of China's sweet potatoes were grown for human consumption, but now most (60%) are grown to feed livestock. China now grows over 100 varieties.

Our first president George Washington grew sweet potatoes on his farmland in Mount Vernon, Virginia.

George Washington Carver did experiments with sweet potatoes from the 1890s through the early 1900, while he was working as director of the Experiment Station at Tuskegee Institute in Alabama. He developed 118 products from sweet potatoes including glue for the postage stamps and starch for sizing cotton fabrics.

Some of the products that have been made from sweet potatoes are flour, starch, sugar, and tapioca.

Sweet potatoes are a super food and they taste great. They are excellent accompaniments to poultry, pork, beef, lamb or seafood. They can also be substituted in virtually any recipe that calls for apples, squash or white potatoes.

GROWING SWEET POTATOES

Sweet potatoes are now cultivated throughout tropical and warm temperate regions wherever there is sufficient water to support their growth. Depending on the cultivars and conditions, tuberous roots mature in two to nine months. With care, early-maturing cultivars can be grown as an annual summer crop in temperate areas, such as the northern United States.



Sweet potatoes rarely flower when the daylight is longer than 11 hours as is normal outside of the tropics. They are mostly propagated by stem or root cuttings or by adventitious roots called 'slips' that grow out from the tuberous roots during storage. They grow well in many farming conditions and have few natural enemies. Pesticides are rarely needed.

One of the enemies is a beetle called the sweet potato weevil. It is about ¼ inch in length, slender and resembles an ant. It feeds on the plant's leaves, stems and roots, and created cavities for depositing its eggs. Its larva hatch and then continue to eat (destroy) the crop. A non-chemical way to get rid of this pest is to starve it by removing the crop (and any from the morning glory family), and not replacing it in the same soil and location for about a year.

Sweet potatoes are grown on a variety of soils, but well-drained light and medium textured soils with a pH range of (4.5-7.0) are more favorable for the plant. They can be grown in poor soils with little fertilizer. Vine cuttings rather than seed planting sow sweet potatoes.

Sweet potatoes are relatively easy to plant. Because the rapidly growing vines shade out weeds, little weeding is needed. In the tropics, the crop can be maintained in the ground and harvested as needed for market or home consumption. In temperate regions, sweet potatoes are most often grown on larger farms and harvested before first frost.

Sweet potatoes are usually cured after harvesting. The curing involves being stored for about 5 days at 85°F (30°C); this dries them out a bit, to preserve their storage life, and converts some of the starch to sugar, making them sweeter.

4

Sweet potato consumption, per capita, in the United States was 13.9 lbs in 1949, 4.1 lbs in 1989, 4.3 lbs in 1992 and 4.6 lbs in 2004. In 2010, 5.7 lbs was the average per capita of sweet potato consumption. Compared to over 130 lbs of white potato.



NUTRITIONAL VALUE

A SWEET POTATO A DAY KEEPS THE DOCTOR AWAY

What would you do to reduce your risk of a stroke, heart disease, and cancer? You could do one simple thing that could provide protection from these diseases. Eat more sweet potatoes. This modest root vegetable is often overlooked and underrated.

The sweet potato ranks extremely high in nutritional value according to the Center of Science in the Public Interest. The Center strongly recommends eating more sweet potatoes since a nutritious diet is one that is high in fiber, provides protein, Vitamins A, C, E, iron and calcium, is rich in complex carbohydrates, and low in fat.

Sweet potatoes contain carotenoids in the form of beta-carotene, (vitamin A) in one cup, which is more than the USRDA. You would have to eat 16 cups of broccoli to consume the same amount of beta-carotene. Carotenoids are associated with stabilizing blood sugar and lowering insulin resistance. Health professionals believe that carotenoids give protection from the formation of free radicals and are chemo protective against cancer. Besides simple starches, sweet potatoes are rich in complex carbohydrates. Pink, yellow and green varieties, are high in carotene, the precursor of Vitamins A.

Sweet Potatoes are packed with massive amounts of vitamin A, a nutrient considered critical in maintaining proper health.

One sweet potato contains nearly eight times an adult's daily need of the important Vitamin A, and because the vitamin A is fat-soluble rather than water-soluble, the body can store it for later use.

A Sweet Potato has 3 to 6% sugar content, which increases during the early stages of cooking as enzymes break its starch down into glucose components. It provides more calories, minerals and vitamins, but less protein, than a white potato. Yellow and orange-fleshed Sweet potatoes are rich in carotene (which your body converts to Vitamin A as needed).

The sweet potato is a good source of dietary fiber, which lowers the risk for constipation, diverticulosis, colon and rectal cancer, heart disease, type-two diabetes and obesity. The fiber in sweet potatoes provides a feeling of fullness and satiety, which helps to control food intake. Antioxidants play a role in the prevention of heart disease and cancer, and sweet potatoes supply plenty of the antioxidants, vitamin E and beta-carotene. These substances are effective in neutralizing free radicals,

which are responsible for damage to cell walls and cell structures. Vitamin E also protects against heart attack and stroke by reducing the harmful effects of low-density cholesterol and preventing blood clots.

Antioxidants are essential for good brain functioning and in delay in the effects of aging on the brain. A low level vitamin E. has been linked with memory loss. This fat-soluble vitamin is found mainly in high-fat foods such as oils, nuts, and avocados. Only the sweet potato provides vitamin E without the fat and calories.

SELECTION AND STORAGE OF THE SWEET POTATO

Choose sweet potatoes that are firm and do not have any cracks, bruises or soft spots. Avoid those that are displayed in the refrigerated section of the produce department since cold temperature negatively alters their taste. Sweet potatoes should feel heavy for their size with a colorful undertone to the skin.

Once you have your sweet potatoes home, store them in a cool, dry, dark place. Keep them loose and storing them in a cool, dark and well ventilated cupboard away from sources of excess heat. Sweet potatoes should never be stored in the refrigerator they will lose flavor and become starchy. They have a shorter home shelf life than white potatoes.



PREPARING AND COOKING SWEET POTATOES



Sweet potatoes are best when they are cooked in their skin, which retains both moisture and nutrients, and the skin peeled off afterwards.

Cook sweet potatoes immediately after cutting and/or peeling: contact with air makes raw sweet potato flesh turns dark. To slow down oxidation (darkening of the flesh) place peeled and/or cut sweet potatoes in a bowl covered with water until you're ready to cook them.

To make peeling easier, you can plunge them in boiling water for a minute, then into cold water. Boil sweet potatoes before peeling: skins slip off easily after they are done cooking.

You can freeze sweet potatoes up to six months if you blanch the peeled spuds first for a few minutes and then submerge them in ice water for 2-3 minutes.

Following these steps will keep sweet potatoes from being mushy and /or stringy once thawed. Peel and cut into pieces. Blanch 3 minutes in boiling water, chill in iced water 3 minutes. Drain and place on a tray in a single layer. Freeze for 30 minutes. Transfer to freezer bags. Remove air, label and seal.

There are many ways to cook sweet potatoes: Baked, boiled, candied, fried, grilled, mashed, casseroles or microwave.

A baked sweet potato is simply the best way to enjoy. Bake for about an hour a 375°F, before baking prick the sweet potato with a fork and wrap in foil. The foil will hold in the natural juices as the sweet potato caramelizes. Yummy!!!

Cooking makes the sweet potatoes nutrients (e.g., beta carotene which the body converts to Vitamin A) Is Bioavailable and easier for the body to absorb.

SWEET POTATO RECIPES

Oven Baked Sweet Potato Fries by Sarah

Ingredients:

½ pound sweet potatoes
1 ¼ cup olive oil
½ teaspoon salt
1 teaspoon paprika
¼ teaspoon cinnamon

Preparation:

Preheat your oven to 425 degrees. Line a baking sheet with foil. Wash and peel your sweet potatoes, cut into ½ inch wide strips. Place the potatoes in a plastic bag and add your oil, salt, pepper, cinnamon and paprika. Mix well until coated. Place onto baking sheet and spread evenly place in oven and cook for about 30 minutes. Turn them every ten minutes to ensure even cooking. Blot with paper towel.

Nutritional Information:

Per 8 oz. serving: 293 Calories; 14 grams of fat; 1.8 grams of saturated fat, 9.9 grams of monounsaturated fat and 1.4 grams of polyunsaturated fat; 40 grams of carbohydrates, 7 grams of fiber and 3.6 grams of protein.

Sweet Potato and Apple Casserole

Created by Gay Lee Rasmussen



Ingredients:

3-4 sweet potatoes
1 cup sugar
2 cups Granny Smith apples
1 tsp salt
1 tsp cinnamon
2 Tbls. cornstarch

½ cup pecans
1 tlb butter
½ cup water
3 cups mini marshmallows

Preparation:

Slice potatoes and apples and layer in buttered pan with marshmallows. Sprinkle with sugar, cinnamon, salt and pecans. Blend cornstarch and water in small bowl and pour over fruit. Dot with butter and bake covered 350° for 1 hour.

Ginny Brehmer's Sweet Potato Casserole

Ingredients:

2½ pounds sweet potatoes
4 tablespoons (½ stick) unsalted butter, melted if potatoes are not hot
½ cup granulated sugar
½ cup milk
2 large eggs
½ teaspoon salt

½ teaspoon pure vanilla extract

Pecan topping:

¾ cup pecans
½ cup packed light brown sugar
3 tablespoons all-purpose flour
4 tablespoons (½ stick) cold unsalted butter

Preparation:

Butter a 9 by 13-inch baking dish or other similar shallow baking dish.

Scrub the sweet potatoes, cut in 2- to 3-inch chunks, and boil in salted water until tender, about 20 minutes. Drain and when cool enough to handle, peel. Mash with a potato masher (you should have about 4 cups) and beat in the butter, sugar, milk, eggs, salt, and vanilla. Spread into the prepared dish. In a food processor, pulse the pecans until chopped medium fine; remove. Add the brown sugar and flour to the work bowl and process to remove large lumps. Cut the butter into chunks, add to the work bowl, and pulse until the mixture resembles coarse meal. Add the pecans and pulse once or twice just to combine. (Or you can make this topping by hand.) Sprinkle over the sweet potatoes. (The casserole can be made several hours ahead and refrigerated. Return to room temperature before baking.) Preheat the oven to 350°F. Bake the casserole until heated through and the topping is golden, 30 to 45 minutes.



Sweet Potato Salad

Ingredients:

4 small sweet potatoes
¼ cup mayonnaise
1 Tbl mustard
4 celery stalks, sliced ¼ inch thick
salt and pepper

1 small red bell pepper, cut into ¼-inch
chopped fresh chives
1 cup diced fresh pineapple
2 scallions, finely chopped
½ cup coarsely chopped toasted pecans

Preparation:

Preheat oven to 400 °F. Wrap each sweet potato in foil and bake for 1 hour. Unwrap and let cool.

Peel and cut into ¾ in. chunks.

In a large bowl, mix mayonnaise and mustard. Add sweet potatoes, celery, red pepper, pineapple and scallions. Toss gently. Season to taste with salt and pepper.

Cover and refrigerate about 1 hour. Fold in pecans and sprinkle with chives.

Sweet Potato Soup

Yield: Makes 4 generous servings

This soup is simple to prepare, easy to serve and great in any season.



Ingredients:

1 onion coarsely chopped
1 pound sweet potatoes (2 medium) peeled and diced
3-½ cups vegetable stock
¾ cup milk
1/8 teaspoon ground nutmeg

2 teaspoons fresh lemon juice, or to taste
Kosher salt
Freshly ground black pepper

Directions:

Place the onion, sweet potatoes and stock in a large saucepan and bring to a boil over high heat. Reduce the heat, cover and cook until the sweet potatoes are soft, about 25 minutes. Remove from the heat and cool slightly. Transfer to a blender and puree in batches until smooth. Return the soup to the saucepan and place over medium heat. Add the milk and heat through. Add lemon juice and nutmeg and season with salt and pepper to taste.

References:

Sweet potato natures Health Food by Dr. Robert Cordell

Science Facts from the Library of Congress

Sweet potato facts

Wikipedia encyclopedia Sweet potato

Sweet on sweet potatoes /lifescrpt.com

www.hort.purdue.edu/ext/HO-136.pdf
WHFfoods: Sweet potatoes

Oregon State University: food resource

Everyday Mystery: fun facts

Recipes for your Life Style

Oven baked sweet potato Fries –half hour meals

AARP magazine Nov/Dec 2010

[http: receipes.aarp.org/recipes/sweet-potato](http://receipes.aarp.org/recipes/sweet-potato)

Sweet potato salad Jamie Chung

Sweet potato soup Helen Nostt

Oven baked sweet potato Fries by Sarah.
Sarahscucinabella.com

QUESTIONS FOR SWEET POTATO QUIZ

1. Is a sweet potato a potato? Yes No
2. Are sweet potatoes and Yams the same? Yes No
3. If weevils contaminate your sweet potato crop, how long does it take to restore the soil so you can plant again? 4 months 6 months 1 year
4. What country produces the most sweet potatoes? China United States Canada
5. What does the country in question 4 do with the majority of sweet potatoes it grows?
 Human consumption Feed them to livestock Ship to other countries
6. Why are sweet potatoes considered a super food?
7. Should sweet potatoes be stored in a cool, dry dark place or should they be stored in the refrigerator?
8. How long can you freeze raw sweet potatoes? 4 months 6 months 1 year
9. Why are sweet potatoes usually cured after harvesting?
10. What was the average per capita of sweet potato consumption in 2010?
 4.1 lbs 5.7 lbs 13.9 lbs
11. What vitamin is the highest in the sweet potato? A C B
12. Is it best to cook the sweet potato with the skin off or on? Off On
13. George Washington developed postage stamp glue from the sweet potato. True False

ANSWERS TO THE SWEET POTATO QUIZ

1. NO The sweet potato is from the morning glory plant family.
2. NO
3. 1 year. By removing the crop and any other morning glory plant and not replacing in the same soil or location for about a year.
4. China - 80%
5. 60% of the crop is fed to livestock.
6. It is high in fiber, has protein, vitamins A, C, E, Iron and Calcium and is rich in complex carbohydrates and low in fat.
7. Cool, dry, dark place away from heat.
8. Up to 6 months
9. It dries them out to preserves their storage life and converts some starch to sugar making them sweeter.
10. 5.7 lbs compared to over 130 lbs of white potatoes
11. One sweet potato contains nearly eight times an adult's daily need of the important Vitamin A.
12. ON
13. FALSE

Potato Story

Well, A girl potato and a boy potato had eyes for each other, and they got married, and had a little sweet potato, which they called 'Yam'.

Of course, they wanted the best for Yam, when it was time, they told her about the facts of life. They warned her about going out and getting half-baked, so she wouldn't get accidentally mashed, and get a bad name for herself like "Hot Potato", and end up with a bunch of Tater tots.

Yam said not to worry; no Spud would let her into the sack and make a rotten potato out of her! But on the other hand she wouldn't stay home and become a Couch Potato either. She would get plenty of exercise so as not to be skinny like her Shoestring cousins.

When she went off to Europe, Mr. And Mrs. Potato told Yam to watch out for the hard-boiled guys from Ireland and the greasy guys from France called the French Fries.

And when she went out west, to watch out for the Indians so she wouldn't get scaloped.

Yam said she would stay on the straight and narrow and wouldn't associate with those high classes Yukon Gold's or the ones from the other side of the tracks who advertise their trade on all the trucks that say Frito Lay.

Mr. and Mrs. Potato sent Yam to Idaho P.U. (That's Potato University) so that when she graduated she'd really be in the Chips.

But in spite of all they did for her, one day Yam came home and announced she was going to marry Tom Brokaw.

Mr. and Mrs. Potato were very upset. They told Yam she couldn't possibly marry Brokaw because he's just

Are you ready for this?

You sure ok here it is

He is just a

A COMMONTATER

