

## OKRA (LADYFINGER-BHINDI) AND HEALTH ITS BENEFITS

When we visited the world's most productive land of okra in a rural area in Kami, Kochi Prefecture, Japan, the young and old all look very healthy. When we asked their secret in having good health in that area, they graciously answer "okra".

Okra has a long history, with its beginnings in Egypt where it is cultivated before the time of Cleopatra. The okra plant spread to many parts of the world during the Atlantic slave trade. During World War II, the shortage of coffee beans made them use okra seeds as a substitute for coffee. This incident made the word "okra fever". Since then, okra's popularity never disappeared from local markets to convenience stores throughout the world and throughout the year.

### Nutritional Information

Okra contains vitamins A and C and is a good source of iron and calcium. It also contains starch, fat, ash, thiamine and riboflavin. No wonder, Cleopatra and Yang Guifei maintained their beauties.

For 1/2 cup sliced, cooked okra	For 1 cup raw okra
Calories – 25	Calories – 33
Dietary Fiber – 2 grams	Fiber – 3.2g
Protein – 1.52 grams	Total Fat – 0.1g
Carbohydrates – 5.76 grams	Protein – 2.0g
Vitamin A – 460 IU	Carbohydrate – 7.6g
Vitamin C – 13.04 mg	Vitamin A – 660 IU
Folic acid – 36.5 micrograms	Vitamin C – 21mg
Calcium – 50.4 mg	Folate – 87.8mcg
Iron – 0.4 mg	Magnesium – 57mg
Potassium – 256.6 mg	
Magnesium – 46 mg	

### Health Benefits of Okra

1. The superior fiber found in okra helps to stabilize the blood sugar by curbing the rate at which sugar is absorbed from the intestinal tract.
2. Okra's mucilage binds cholesterol and bile acid carrying toxins dumped into it by the filtering liver.
3. Okra helps lubricate the large intestines due to its bulk laxative qualities. The okra fiber absorbs water and ensures bulk in stools. This helps prevent and improve constipation. Unlike harsh wheat bran, which can irritate or injure the intestinal tract, okra's mucilage soothes, and okra facilitates elimination more comfortably by its slippery characteristic. Okra binds excess cholesterol and toxins (in bile acids). These, if not evacuated, will cause numerous health problems. Okra also assures easy passage out of waste from the body. Okra is completely non-toxic, non-habit forming, has no adverse side effects, is full of nutrients, and is economically within reach of most individuals unlike over-the-counter drugs.
4. Okra fiber is excellent for feeding the good bacteria (probiotics). This contributes to the health of the intestinal tract.
5. Okra is a supreme vegetable for those feeling weak, exhausted, and suffering from depression.
6. Okra is used for healing ulcers and to keep joints limber. It helps to neutralize acids, being very alkaline, and provides a temporary protective coating for the digestive tract.
7. Okra treats lung inflammation, sore throat, and irritable bowel syndrome.
8. Okra has been used successfully in experimental blood plasma replacements.
9. Okra is good for summer heat treatment.
10. Okra is good for constipation.
11. Okra is good in normalizing the blood sugar and cholesterol level.
12. Okra is good for asthma. Okra's vitamin C is an antioxidant and anti-inflammatory, which curtail the development of asthma symptoms.
13. Okra is good for atherosclerosis.
14. Okra is believed to protect some forms of cancer expansion, especially colorectal cancer.
15. Eating okra helps to support the structure of capillaries.
16. Some information shows that eating okra lowers the risk of cataracts.
17. Okra is good for preventing diabetes.

18. Okra protects you from pimples and maintains smooth and beautiful skin. We understand the reason why Cleopatra and Yang Guifei loved to eat okra.

There are other medicinal uses of okra, like its protection against trans fats.

I myself planted about 25 stems of okra in my backyard garden throughout the year for over 20 years now. I can pick up about 20 pieces of okra pod every morning. All okra pods are consumed by my family. There are hundreds of recipes that can be done. You can either: cut it raw and mix with vinegar and pepper; cut it raw and mix with mayonnaise; steam, cut, with mayonnaise dressing; or, cook with stew or soup.

Okra is easy to grow anywhere during summer season in cold countries and throughout the year in tropical areas. You can even plant it in a container garden at the terrace in condominium buildings.

To tell you the truth, I did not know that okra seed was used as a substitute for coffee beans during World War II. I have about 500 grams of okra seeds, so I roasted one-half of it using an iron cast pan, and pulverized it. I made okra coffee with it, and it tasted like real coffee although it was darker in color. When I offered the okra coffee to my staffs and visitors who did not know the real thing, they replied "Oh, you got a new blend of coffee, taste is good". I blended it with real coffee, too. It tastes all right. We do not know, however, what nutrients okra coffee gives.

## Okra nutrition facts

Okra, also known as "*lady finger*" or "gumbo", is a highly nutritious green edible pod vegetable. Botanically, this perennial flowering plant belongs to the *mallow* family and named scientifically as *Abelmoschus esculentus*.

The plant is cultivated throughout the tropical and warm temperate regions of the world for its fibrous fruits or "pods". It grows best in well drained and manure soil. The plant bears numerous dark green colored pods measuring about 5-15 cm in length. It takes about 45-60 days to bear ready-to-harvest fruits.

Internally, the pods feature small, round, mucilaginous white colored seeds arranged in vertical rows. The pods are harvested while immature and eaten as vegetable.

## Health benefits of Okra

- Very low in calories, provides just 30 cal per 100 g and contains no saturated fats or cholesterol; but is a rich source of dietary fiber, minerals, vitamins; recommended in cholesterol controlling and weight reduction programs.
- The rich fiber and mucilaginous content in Okra pods helps smooth peristalsis of digested food particles and relieve constipation condition.
- The pods contain healthy amounts of vitamin A, and flavonoid anti-oxidants such as beta carotenes, xanthin and lutein. It is one of the *green* vegetable with highest levels of these anti-oxidants. These compounds are known to have antioxidant properties and are essential for vision. Vitamin A is also required for maintaining healthy mucus membranes and skin. Consumption of natural vegetables and fruits rich in flavonoids helps to protect from lung and oral cavity cancers.
- Fresh pods are good source of folates; provide about 22% of RDA per 100 g. Consumption of foods rich in folates, especially during pre-conception period helps decrease the incidence of neural tube defects in the offspring.
- The pods are also an excellent source of anti-oxidant vitamin, vitamin-C; provides about 36% of daily recommended levels. Consumption of foods rich in vitamin-C helps body develop immunity against infectious agents, reduce episodes of cold and cough and protects body from harmful free radicals.
- The veggies are rich in B-complex group of vitamins like niacin, vitamin B-6 (pyridoxine), thiamin and pantothenic acid. The pods also contain good amounts of vitamin K. Vitamin K is a co-factor for blood clotting enzymes and is required for strengthening of bones.
- The pods are also good source of many important minerals such as iron, calcium, manganese and magnesium.

See the table below for in depth analysis of nutrients:

Okra (*Abelmoschus esculentus*), Fresh, raw pods,  
Nutrition value per 100 g.  
(Source: USDA National Nutrient data base)

Principle	Nutrient Value	Percentage of RDA
Energy	1.5%	31 Kcal
Carbohydrates	7.03 g	5.4%
Protein	2.0 g	4%
Total Fat	0.1 g	0.5%
Cholesterol	0 mg	0%
Dietary Fiber	9%	3.2 g

Vitamins		
Folates	88 mcg	22%
Niacin	1.000 mg	6%
Pantothenic acid	0.245 mg	5%
Pyridoxine	0.215 mg	16.5%
Riboflavin	0.060 mg	4.5%
Thiamin	0.200 mg	17%
Vitamin C	21.1 mg	36%
Vitamin A	375 IU	12.5%
Vitamin E	0.36 mg	2.5%
Vitamin K	53 mcg	44%
Electrolytes		
Sodium	8 mg	0.5%
Potassium	303 mg	6%
Minerals		
Calcium	81 mg	8%
Copper	0.094 mg	10%
Iron	0.80 mg	10%
Magnesium	57 mg	14%
Manganese	0.990 mg	43%
Phosphorus	63 mg	9%
Selenium	0.7 mcg	1%
Zinc	0.60 mg	5.5%
Phyto-nutrients		
Carotene-β	225 mcg	--
Crypto-xanthin-β	0 mcg	--
Lutein-zeaxanthin	516 mcg	--

## Selection and storage

Fresh and immature okra pods are readily available in the stores all around the year. The pods have attractively rich green color and neutral flavor. In the store, look for crispy, immature pods and avoid those with over-ripen, sunken appearance, discolored spots, cuts and too soft.

Once at home, place them inside the refrigerator. Eat them while they are fresh to obtain full benefits of vitamins and anti-oxidants.

## Preparation and serving methods

Some hybrid varieties are usually subjected to insecticide powder or spray. Therefore, wash the pods thoroughly in the water in order to remove dust, soil and any residual insecticides.

Trim the crown end and tips. The pods are generally cut into small circular sections and used in variety of cuisines in Indian and Asian countries.

Here are some serving tips:

- Okra pods are one of the widely used vegetable in tropical countries. Chopped or sliced pods are then stewed or fried in low heat oil in order to remove mucilaginous content. It then, can be mixed with other vegetables, rice or meat.
- In Caribbean islands okra is cooked up and eaten as soup, often with fish.
- The pods can be pickled and preserved like in other vegetables.
- Okra leaves may be cooked in a similar manner as the greens of beets or dandelions. The leaves are also eaten raw in salads.

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