**Asparagus**

1. **What is it?**
2. The name comes from the Greek language meaning “sprout” or “shoot”
3. Member of the Lily family
4. Can be found in three varieties but most typically just two are more widely available.
5. Green asparagus is the most common in the US
6. 80% of the asparagus in the US is grown in California
7. It is also grown in Michigan & Washington
8. White asparagus is more popular in Europe
9. White asparagus comes from the same plant as green. It is only because the stalks are grown under the soil that they remain white. (no photosynthesis)
10. White asparagus is nutritious but is not as high in several nutrients as green asparagus
11. Purple asparagus is generally found in Italy and England
12. Purple asparagus is sweeter and more tender than green so is ideal for salads
13. Purple asparagus stalks are thick and each plant produces fewer stalks than green or white plants do.
14. **History**
15. Significant cultivation began more than 2000 years ago in the Eastern Mediterranean region.
16. As far back as 200BC Cato documented detailed growing instructions for the plant
17. The asparagus growing beds of Northern Italy were famous during the Renaissance period (1400-1600).
18. In 16th century it started gaining popularity in England and France
19. From there, early colonists introduced it to North America, often referring to it as “Food of Kings”
20. King Louis XVI of France was so fond of asparagus that his gardeners were instructed to grow it in hothouses so he could have it year round.
21. Early Greeks and Romans believed asparagus to have medicinal properties from healing toothaches to preventing bee stings. They also believed it to be an aphrodisiac.
22. **Health Benefits**
23. Even though myths about it’s healing properties exist, asparagus is probably among the most nutritionally well-balanced vegetables.
24. Among vegetables it is the leading supplier per serving of folic acid!
25. 5 spears provide about 60% of the daily requirement.
26. Folic acid is important for blood cell formation, growth, and a healthy liver.
27. Folic acid (also called Folacin) is a B vitamin.
28. Asparagus is high in other B vitamins such as thiamin and B6. It’s also high in vitamin C.
29. Asparagus has no fatand is very low in calories. Less than 4 calories per spear! (the whole spear not just the crown.)
30. It is a good source of potassium and is very low in sodium…both of which are important for blood pressure control.
31. Asparagus also has about 3 grams of fiber per serving (about 5 spears).

**What is an antioxidant?**

Antioxidants are compounds that help our bodies get rid of harmful substances. These substances that are normally produced by the body and are often called “free radicals.”

1. Asparagus is one of the richest sources of ***rutin,*** a compound that strengthens the walls of the small blood vessels called capillaries. This substance has antioxidant properties. 🡺🡺
2. Asparagus is rich in another antioxidant called ***glutathione***. Even though our bodies can actually make this compound, we do benefit from getting it in our diets. Glutathione is involved in removing toxic substances, improving immune function, protecting cells and repairing damaged DNA. While it hasn’t been shown to cure or prevent cancer, there is certainly enough reason to make asparagus a regular part of the diet.
3. **Why does asparagus make my urine smell funny?** See narrative attached *“The Great Debate”*
4. **Fun Facts**
5. Asparagus stalks can grow as much as 10” in a 24 hour period under ideal conditions! Some say you can actually lie on the ground and watch it grow!
6. Purple asparagus will maintain the purple color with brief sautéing but prolonged cooking will cause it to become green.
7. *“As quick as cooking asparagus”* was an old Roman saying that meant something was accomplished rapidly.
8. Through the centuries the name hasn’t changed much…once called “**asparag**”… “**sparagus**” and even “**sparrow grass**” which was the name given to it by 16th century English peasants.
9. Asparagus is planted in the ground three years before it can be harvested for a full season.
10. Most commercial plants generally last 8-12 years.
11. Asparagus is generally available in four sizes: Jumbo, Extra Large, Large and Standard. Some people mistakenly think that jumbo asparagus is left in the field to get old or fat. It is actually harvested every day during the season. The larger sized asparagus comes from younger, more vigorous plants, while the smaller sized spears come from older plants, or plants that have been planted closer together.
12. Stockton, CA actually has an Asparagus Festival every year!
13. China is by far the leading producer of asparagus followed by Peru and then Mexico. Spain is Europe’s largest producer followed by Germany and Greece. Only Peru and Mexico grow green asparagus for export to the US.
14. Michigan asparagus is said to be “hand snapped” above the ground in harvesting. Other areas harvest by cutting below the ground. This means each spear of Michigan grown asparagus is entirely edible and does not need to be trimmed.
15. **Storage, Cooking & Serving Ideas**
16. Keep fresh asparagus clean, cold, covered and moist until you plan to use. Trim steam end about ¼” and wash in warm water. Pat dry, then wrap ends in moist paper towel and place in covered container. Best if used within 2-3 days. You can also stand upright in 2 inches of cold water and refrigerate.
17. To Freeze: Trim ends only slightly. Leave stems whole or cut into 2” sections. Blanch 1-2 minutes ONLY. Immediately place in ice water bath to cool. Drain well and place in freezer-safe bags/containers. Use within 8 months.
18. For best results, do not thaw frozen asparagus before cooking, as it will be more likely to become mushy.
19. Store canned asparagus in cool, dry place.
20. Don’t cook asparagus in an iron pot because a substance present in asparagus reacts with the iron.
21. Asparagus is excellent in soups, stews, stir-frys, salads, casseroles and in other main entrees.
22. Asparagus can be sautéed, grilled, roasted, baked, boiled, but is also commonly eaten raw.
23. **Activities**
24. Asparagus Bingo
25. Show samples of green and white asparagus, and give pieces of each to sample raw.
26. Demonstrate preparation of

**The Great Debate**

**Does Asparagus Make Urine Smell?**

If you've ever eaten asparagus, something strange may have happened about 20 minutes after eating it. Perhaps you noticed, perhaps you didn't, but chances are that [tasty](http://www.ehow.com/how-does_4586963_asparagus-urine-smell.html) asparagus side dish left something behind for you. Sure, it's a rather odd token of appreciation, but that popular green veggie called asparagus is known to cause a rather strange smell in the urine of those who consume it.

**The Facts**

Asparagus contains a sulfur-containing compound identified by scientists as methyl mercaptan. A colorless gas, this compound is also found in blood, feces, garlic, eggs, cheese and even skunk secretions. In fact, methyl mercaptan is one of the major contributors to bad breath and flatulence odors.

In addition, asparagus contains an amino acid called asparagine. Present in [foods](http://www.ehow.com/food-and-drink/) like dairy products, seafood, poultry, fish and nuts, this amino acid is known to have a distinctive smell when heated.

To metabolize both **methyl mercaptan** and **asparagine**, the digestive track must break these compounds down and it is this breakdown that's responsible for your urine's strange smell.

**Now begins the Debate**

Since both methyl mercaptan and asparagine are associated with the sense of smell, there is debate over which ingredient is actually responsible for the asparagus-urine phenomenon.

Depending upon whom you ask, some scientists may blame it on the methyl mercaptan while others argue that asparagine is the cause for the odor. Some even think that it's the combination of both compounds. Regardless of the exact culprit, the reason why your urine smells after eating asparagus is simple: because of the way your body breaks it down.

**And if that weren’t enough of a Debate**

Some people claim that their urine doesn’t smell regardless of how much asparagus they eat. There are multiple theories regarding that as well.

One theory claims that everyone's urine is affected by asparagus, but only about half of the population have the specific gene that is required to smell the change.

The second theory states that only half of the world's population has the gene that's required to break down the compounds found in asparagus and, if the body doesn't break them down, no smell is emitted.

Whichever reason is correct, for many people, asparagus will forever be known as the vegetable that makes your urine smell strange!