

What is the universal edibility test?

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Getting lost or stranded in the wilderness is serious business, and you need to make sound decisions to give yourself the best chance at [survival](#). It also helps to know some basic wilderness survival skills. To make sure you're safe from the elements, you'll need to know [how to build a shelter](#). To provide you with an opportunity to cook food, boil [water](#) and [send a rescue signal](#), you should learn [how to build a fire](#) without a match or lighter. The other crucial component to survival is [finding water in the wild](#). People can [live without food](#) for up to a month, but water is necessary to keep us alive.

But just because you can live without food doesn't mean you should. Going without food will leave you weak and apt to make poor decisions, which could endanger your life. Being able to identify edible plants in the wilderness is a good skill to have under your belt. The problem is, there are more than 700 varieties of poisonous plant in the United States and Canada alone, so unless you have a book that clearly identifies edible species, it's nearly impossible to determine whether or not a plant will make you sick with absolute certainty.

It's dangerous to eat a plant you're unsure of, especially in a survival scenario. It's better to be hungry than to poison yourself. Some poisonous plants look a lot like edible plants. Some plants have parts that are edible and parts that are toxic. Some are only edible for certain periods throughout the year. You can see where mistakes can easily be made.

If you're in a survival situation and you don't have a book on local edible plants, there is a test you can perform to give yourself a good shot at eating the right thing. It's called the universal edibility test, and we'll cover it in this article.

Universal Edibility Test:

Separate, Contact, Cook and Taste!

The universal edibility test requires breaking down the parts of a plant and testing them individually over a period of 24 hours. In a survival situation, you don't want to go through this trouble if there isn't a lot of the plant you're testing. If there are only a few sprigs of what you think might be the colorful and edible borage, it won't help you much even if you find that it is the cucumber-like herb. Find something near you that's growing in abundance. To prepare for the test, don't eat or drink anything but **water** for at least eight hours beforehand. If you're lost or stranded in the wild without any **food**, this should be pretty easy to accomplish. Now it's test **time**:

Separate - Because only some parts of the plant may be edible, separate it into its five basic parts. These are the leaves, roots, stems, buds and flowers. There may not be buds or flowers. Check out the parts for worms or insects -- you want a clean and fresh plant. Evidence of parasites or worms is a good sign that it's rotting. If you find them, discard the plant and get another of the same variety or choose a different one.

Contact - First you need to perform a contact test. If it's not good for your skin, it's not good for your belly. Crush only one of the plant parts and rub it on the inside of your wrist or elbow for 15 minutes. Now wait for eight hours. If you have a reaction at the point of contact, then you don't want to continue with this part of the plant. A burning sensation, redness, welts and bumps are all bad signs. While you wait, you can drink water, but don't eat anything. If there is no topical reaction after eight hours, move along to the next step.

Cook - Some toxic plants become edible after they're boiled, so get out your apron and start cooking. Your goal is to test it how you would eat it, so if you don't have any means to boil the plant part, test it raw. Once you've boiled it, or if you're going raw, take the plant part and hold it to your lip for three minutes. If you feel any kind of burning or tingling sensation, remove the piece from your lip and start over with a new part. If there's no reaction, press on.

Taste - Pop the same part in your mouth and hold it on your tongue for another 15 minutes. If you experience anything unpleasant, spit it out and wash your mouth with water. You're looking for a similar burning or tingling as you did on your lip. It may not taste great, but that doesn't mean it's toxic.

If there's no adverse reaction in step four, keep on truckin' to the following page for the next steps.

SURVIVAL SUSHI

In Japanese restaurants, [sushi](#) rolls are wrapped in sheets of nori -- dried seaweed. In an [island survival](#) scenario, seaweed is good to eat and loaded with iodine and [vitamin C](#). Look for living seaweed in the water and stay away from the green stuff washed up on the beach. You can dry the seaweed in the sun or crisp it over an open flame. It also makes a good base for soup if you're able to boil some water. But beware -- eating a lot of seaweed on an empty stomach can give you some pretty bad diarrhea.

Universal Edibility Test: Chew, Swallow and Chow!



Despite the milky white sap in the stem, all parts of the dandelion are edible. Boil the leaves or bake and grind the root for a coffee substitute.

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If you've made it this far through the test, then you're well on your way to determining if part of the plant is edible. But before you can start wolfing

down that root, stem or flower, there are a few more steps to the universal edibility test.

Chew - After you've held the piece of plant on your tongue for 15 minutes with no adverse reaction, chew it thoroughly and hold it in your mouth for another 15 minutes. Don't swallow. Once again, if you feel any kind of burning, tingling or numbness spit it out and rinse with [water](#).

Swallow - If you make it through step five, you'll have a pretty soggy piece of plant in your mouth. At the end of the 15 minutes, you need to swallow that soggy piece. Now comes more waiting. Don't eat anything for eight hours. You can drink water, but no more plant or any other kind of [food](#). If you feel nauseous, you need to induce vomiting and drink a lot of water. If you feel fine during the eight-hour waiting period, proceed to the next step.

Chow - Now you get to chow down a little. Gather roughly one quarter cup of the exact same part of the same plant and prepare it in the same way you did in step three. Eat the plant and wait another eight hours. If you feel sick, follow the same steps as above. You can drink water during the waiting period, but as always, refrain from eating anything else.

If you make it through this final waiting period and you feel fine, then congratulations, you just aced the universal edibility test. You can now assume that this one part of this one plant is safe to eat if prepared in the same way. In order to determine if the other parts of the plant are safe to eat, you need to perform the same test on those parts. It's a time-consuming process, but if you're in a [survival](#) situation, it might just

save your life. Try to multi-task during the waiting periods -- gather wood, [build your shelter](#), hunt or fish for food, [find water](#) and [signal for help](#).

PLANT WARNING SIGNS

Aside from the universal edibility test, there are a few other tips on what kinds of plants you should avoid. These tips may rule out some plants that are edible, but it's better to do that than to risk getting poisoned.

- Never eat plants with thorns.
- Steer clear of plants with shiny leaves.
- Don't eat mushrooms. Many are safe to eat, but many are highly toxic and even deadly, so it's not worth the risk.
- Umbrella-shaped flowers are a bad sign. Stay away from these plants.
- Don't eat plants with white or yellow berries.
- If the plant's sap is milky or discolored, leave it alone.
- Avoid beans or plants with seeds inside a pod.
- If it tastes bitter or soapy, spit it out.
- Avoid anything that smells like almonds.
- Same as poison ivy, stay away from plants with leaves in groups of three.

Related HowStuffWorks Articles

- [Top 5 Most Poisonous Plants](#)
- [How Entomophagy Works](#)
- [How Poison Ivy Works](#)
- [How Venus Flytraps Work](#)

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- **[Harrowing Survival Stories](#)**
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- **[How does hemp work?](#)**
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- **[If I kill an animal, can I eat it raw?](#)**

More Great Links

- **[The Nature Conservancy](#)**
- **[Survival IQ](#)**
- **[The Edible Schoolyard](#)**

Sources

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