

40 Sources of Lysine to Add to Your Plate

Medically reviewed by

Natalie Butler, RD, LD on

May 24, 2018 — Written by

Kathryn Watson

Overview

Lysine is one of the essential amino acids that your body needs to build proteins. Since our bodies can't produce essential amino acids, including lysine in your diet is the only way to make sure you're getting it.

Lysine plays an important role in supporting your [immune system](#). It may also improve athletic performance. People with certain health conditions, like the [herpes simplex virus \(HSV\)](#) and [diabetes](#), may also benefit from consuming extra lysine.

Dosage recommendations for lysine vary according to what you're using it for. The typical dietary guideline for lysine is 1 gram (g) or 1000 milligrams (mg) per day.

Keep reading to find out the best ways to get lysine in your diet and what you should know about taking lysine supplements.

Plant-based foods rich in lysine

Although animal products are the most well-known sources of lysine, you can get plenty of it from vegan or vegetarian sources as well. Many foods that are high in lysine also happen to be staples of a [healthy diet](#) that's rich in proteins, vitamins, and minerals.

If you're interested in upping your lysine intake while consuming as little [arginine](#) as possible, try eating dried apricots. On average, dehydrated, uncooked apricots have twice as much lysine as arginine per serving.

[Arginine](#) is a semi-essential amino acid, which means your body makes it in addition to getting it from food sources. You should be getting enough arginine from a well-balanced diet. Arginine is good for you but it competes with lysine for absorption. For certain conditions, and to get as much benefit from lysine as possible, you'll want to consume less arginine.

Here are some more great plant-based sources of lysine:

Vegetables and fruit

- [avocados](#)

- [dried apricots](#) and [mangoes](#)
- [beets](#)
- [leeks](#)
- [tomatoes](#)
- [pears](#)
- [green and red peppers](#)
- [potatoes](#)

Legumes

- soy-based products like:
 - [tempeh](#)
 - [tofu](#)
 - [soybeans](#)
 - soy milk
- [beans](#), including:
 - [kidney beans](#)
 - navy beans
 - black beans
- [chickpeas](#) and [hummus](#)
- [lentils](#)
- [edamame](#)

Nuts, seeds, and grains

- [pumpkin seeds](#)
- [pistachios](#)
- [cashews](#)
- macadamia nuts

[Grains](#) aren't usually rich in lysine but some notable exceptions — that just happen to be great for you — are:

- [quinoa](#)
- [amaranth](#)
- [buckwheat](#)
- [seitan](#)

Meat and dairy products rich in lysine

Animal products like [fish](#) and [eggs](#) are rich in lysine. Other animal-based sources of lysine include:

Dairy-based products

- [yogurt](#)

- cheese
- [butter](#)
- [milk](#)

Seafood

- oysters
- [shrimp](#)
- snails

Meats

- [beef](#)
- [pork](#)
- [chicken](#)

If you want to consume additional [lysine for the treatment of the herpes simplex virus](#), keep your [arginine](#) consumption low. Diets high in lysine and low in arginine [can be used](#) to help prevent and treat herpes.

One example of a dairy product that may meet that need is grated, low-fat parmesan cheese. This cheese ranks high in lysine and lower in arginine with:

- 2.2 grams of lysine per 100 grams of cheese
- 1.5 grams of arginine

Roasted beef and steaks are also high in lysine content without being high in arginine. A top round steak (85 grams or 3 ounces) with bones and fat trimmed gives you:

- 3 grams of lysine
- just a little over 2 grams of arginine

Other sources of lysine

Spirulina

[Spirulina](#) is a type of algae that's prepared and safe for human consumption. Spirulina supplements, spirulina powder, and whole spirulina contain high amounts of lysine.

[Shop for spirulina and superfood powders here.](#)

Supplements

Lysine supplements are easy to find at health food stores, over-the-counter at pharmacies, and online. If you want to consume more lysine as a way to treat a health condition, speak to your doctor before you try it. If you're looking to treat a health condition with lysine supplements without consuming excess arginine, look for capsules marketed without arginine — there are plenty.

Keep in mind that lysine supplements aren't subject to FDA monitoring. Only buy lysine supplements from suppliers that you trust, and those that are [NSF certified](#) or rate well with [Consumer Lab](#).

[Shop for L-lysine supplements here.](#)

Benefits of lysine

Protein hormones stabilize the basic functions of your body, like your sleep and your metabolism. These protein hormones, like [insulin](#), [melatonin](#), and [growth hormones](#), are composed of hundreds of thousands of amino acid chains.

Cells in your body are constantly being broken down and restored, so your body needs amino acids like lysine to produce new hormones. Antibodies, which help your body fight viruses and infection, are made of proteins. And enzymes, which aid in all of your body's processes including digestion, are also made of these proteins.

Lysine is even used by your body to create [collagen](#), the main structural protein in your skin.

Lysine has been studied for its impact on several health conditions. It may help with the following:

Lysine may bring down blood pressure

In [one study](#) on both men and women with [hypertension](#) (high blood pressure) who were lysine-deficient, taking lysine supplements brought down their blood pressure.

Lysine can help fight herpes outbreaks

Research has [suggested](#) that consuming foods high in lysine and low in arginine may help suppress episodes of the herpes simplex virus. Anecdotally, many people who have herpes simplex find that adding foods rich in lysine and low in arginine to their diet helps with their symptoms.

[The Mayo Clinic](#) acknowledges that lysine in a cream and capsule form may be effective to treat [cold sores](#).

Lysine may help with symptoms of anxiety

Lysine supplements used in [one 2004 study from Syria](#) found improvement in people with long-term [anxiety](#) and an acute stress response. Another trial from 2003 that used lab rats that lysine may be helpful to treat intestinal distress linked to anxiety.

More studies are needed to understand the way this works and if adding more lysine to your diet could have similar results.

Lysine may help insulin resistance

A [small study from 2009](#) that followed 13 people over the course of 9 years has suggested that lysine ingestion may improve glucose response for people who have diabetes, although current research is somewhat conflicting. Lysine's role in helping your body process and produce hormone proteins, such as insulin, may have something to do with this.

We still need more research to understand lysine's effect on blood sugar.

Things to consider

We still need more research to understand the effects of taking lysine supplements long term. Consuming too much lysine can lead to abdominal cramps and diarrhea. You can avoid side effects by staying within the recommended daily dose of any product you use.

Since lysine can increase your body's ability to absorb calcium, you should ask a doctor about taking lysine if you're already using calcium supplements. Women that are pregnant or breastfeeding should speak to a doctor before taking lysine or any other supplements.

Lysine in your life

Lysine is an essential amino acid that your body doesn't naturally produce. Consuming more lysine — through your diet or through supplements — may improve certain health conditions. It may also improve your health overall by helping your body produce collagen, digestive enzymes, antibodies, and protein hormones. When possible, try to get your lysine naturally, from foods.

Lysine isn't a substitute for prescription medication for any health condition. Lysine supplements are safe for most people and severe side effects from lysine are rare. Speak to your doctor if you have any questions about lysine use or dosing.

Healthline and our partners may receive a portion of revenues if you make a purchase using a link above.

