Grow Your Own VEGETABLE SPROUTS

N.S. MANSOUR

prouts of certain seeds have been popular ingredients in Oriental cookery for more than 5,000 years. As early as 2939 B.C., the emperor of China recorded the use of "health-giving sprouts" in a book about plants. Today, these germinated seeds of grains and legumes are gaining popularity in American kitchens and salad bars. And they're being used for far more than Oriental cooking.

Most supermarkets stock at least one type of sprout in their fresh produce sections. In addition, bean sprouts come in cans. Sprouts add flavor, color, crunch, and extra nutrition to a variety of dishes from casseroles and salads to sandwiches.

Sprouts provide some protein, vitamins, and minerals. As seeds sprout, carbohydrates decrease and water content increases, making sprouts lower in calories than seeds. Therefore, the nutrient-to-calorie ratio of some vitamins and minerals in sprouts is particularly high compared to the same ratio in nongerminated seeds. Sprouts are low in fat, and since sprouts are vegetables, they contain no cholesterol.

The cost of growing sprouts at home is low. Compared to almost any other fresh vegetable, homegrown sprouts are a bargain.

Seeds make up a major part of the world's diet. As much as 70% of the world's protein comes from grain crops. Legumes such as lentils, beans, and peas are the second-largest group of seeds used for food. Sprouting

seeds changes a dry, storable product into a fresh vegetable. One pound of seeds will yield about 8 pounds of sprouts.

Pacific Northwest residents are fortunate in being able to obtain a wide variety of seeds for sprouting.

Selecting seeds

Use the best-quality seeds available for sprouting. This year's crop is best although older seeds can be used. Buy seeds sold expressly for sprouting or seeds sold as food items. Beans and grains marketed for sprouting are the most reliable—the seeds were produced for their ability to germinate. However, you can use ordinary beans and grains from the supermarket.

Garden seeds have usually been treated with a fungicide or other pesticide, which could be dangerous to consume—don't use them for sprouting.

Remember: Seeds for sprouting must be not only edible but also capable of germinating.

You can obtain seeds from four major sources: mail-order seed companies, health food stores, regional cooperatives, and your local supermarket.

The mail-order company is generally the most expensive, but it provides the convenience of shopping at home and by mail. These companies usually offer a wide variety of sprouting seeds.

Health food stores usually offer a variety of seeds for sprouting and

allow customers to inspect the seeds for wholeness, cleanliness, and intact seed coats. Regional food cooperatives often are the least costly source of seeds.

Supermarkets often sell seeds expressly for sprouting. However, their selections may be limited. Even so, a local supermarket might be a good place to begin purchasing seeds for sprouting. As you become more adventuresome, experiment with some of the more exotic seeds you'll find at health food stores and in mail-order catalogs.

Sprouting

For seeds to germinate or "sprout," they need moisture, warmth, and room to expand. As the seeds germinate, chemical changes occur, releasing carbon dioxide, other gases, waste products, and heat. Rinsing sprouts with cool water will prevent these byproducts from accumulating.

In cold weather, slightly warm rinsing water will speed the sprouting process. Most sprouts grow best between 75 and 85°F, away from drafts and direct heat.

Before you start, wash the seeds thoroughly; remove chaff and broken or cracked seeds. In general, you

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Table 1.—How to sprout a variety of seeds

Seed	Suggested method	Temp.	Rinsing/ sprinkling frequency	Sprouting time	Length of sprouts at harvest	Yield
Alfalfa	Jar	70-85°F (optimal 72°)	3-4 times/day	3-5 days	1-2 inches	3 Tbsp = 1 qt. sprouts
Barley	Jar	70-80°F	2-3 times/day	3-4 days	$\frac{1}{4}$ inch	$\frac{1}{2}$ cup = 1 cup sprouts
Beans (great northern, white, lima, navy,						
pinto, red)	Jar	70-85°F	3-4 times/day	3-5 days	1-2 inches	$\frac{1}{2}$ cup = 2 cups sprouts
Buckwheat	Paper towel		1 time/day			
	or jar	70-80°F	(or as needed)	2-3 days	¹⁄4–¹∕2 inch	$\frac{1}{2}$ cup = $\frac{1}{2}$ cup sprouts
Chia	Sprinkle	70-85°F	1 time/day (or as needed)	4 days	1½ inch	$2 \text{ Tbsp} = 3\frac{1}{2} \text{ cups}$
Corn	Jar	72-85°F	2-3 times/day	2-3 days	½ inch	$\frac{1}{2}$ cup = 1 cup sprouts
Garden cress	Jar or sprinkle	50-68°F	2 times/day	3-4 days	1½ inch	2 Tbsp = 3 cups sprouts
Fenugreek	Jar	70-85°F	1-2 times/day	4-5 days	3 inches	$\frac{1}{4}$ cup = 4 cups sprouts
Garbanzo beans	Jar	68-72°F	4-6 times/day	3 days	½ inch	$\frac{1}{2}$ cup = 3 cups sprouts
Lentils	Jar	70-85°F	2-3 times/day	3-4 days	1 inch	$\frac{1}{2}$ cup = 3 cups sprouts
Mung beans	Jar	70-85°F	4-5 times/day	3-4 days	2 inches	$\frac{1}{2}$ cup = 2 cups sprouts
Radish	Jar	70-85°F	2 times/day	3-5 days	1-2 inch	2 Tbsp = 3 cups sprouts
Rye	Jar	50-68°F	2-3 times/day	3-4 days	¹⁄4–¹⁄2 inch	$\frac{1}{2}$ cup = 2 cups sprouts
Soybeans	Jar	70-85°F	6-8 times/day	4 days	2 inches	$\frac{1}{2}$ cup = 2 cups sprouts
Wheat	Jar	70-80°F	2-3 times/day	3-4 days	½ inch	$\frac{1}{2}$ cup = 2 cups sprouts

should presoak the seeds in about four times their volume of water for about 8 hours. In cold weather, increase soaking times by a few hours.

You can use various methods to sprout seeds. The most popular are the jar method, the paper towel method, and the sprinkle method. The type of seed influences the method used for sprouting (see table 1 for details). One-quarter cup of seeds will produce about 2 cups of sprouts. One-quarter cup of seeds works well for the following methods.

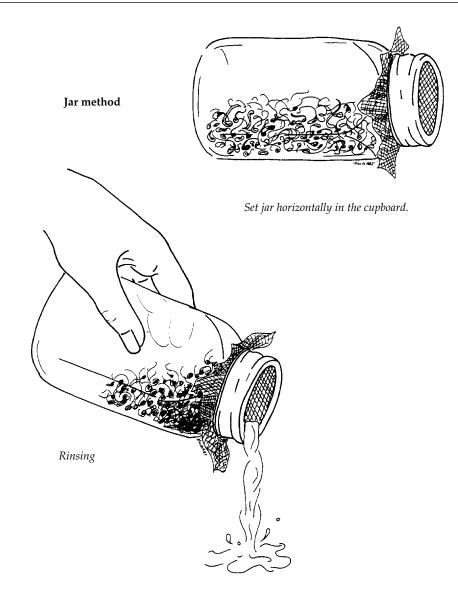
Jar method

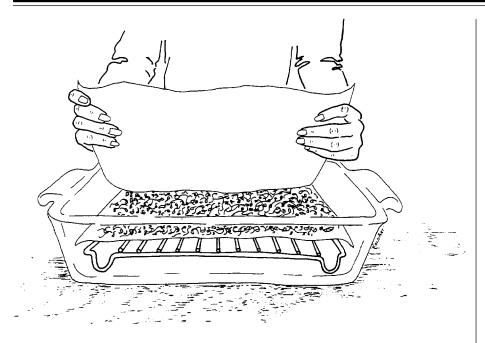
Equipment

- wide-mouth quart jar
- cheesecloth, nylon net, nylon stocking, or plastic screen
- rubber band, jar ring, or string

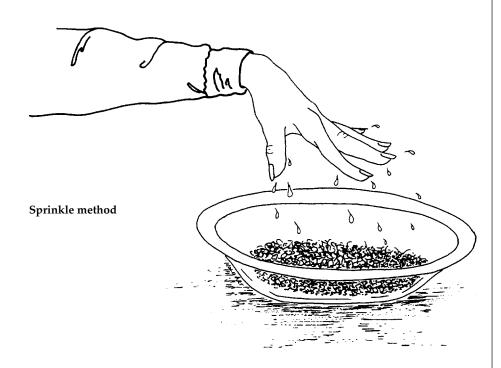
Procedure. Place presoaked seeds in the jar (you can presoak directly in the jar). Cover opening with a piece of cheesecloth, nylon net, or nylon stocking; hold it in place with a rubber band or string. A piece of plastic screen cut to fit inside a jar ring also works very well.

Lay the jar in a bowl, mouth down at a slight angle, to catch drainage. Cover the jar with a brown paper bag if you plan to leave the jar in the light. Otherwise, keep the sprouting jar in a





Paper towel method



cupboard where it will be dark and the temperature more even.

Rinse and drain seeds two to six times a day, depending on the type of seed and the weather. In warm, dry weather, the water evaporates quickly, so more rinses are needed. When sprouts are the length you want (see table 1 for suggested lengths), you can place the jar in the light for "greening" the sprouts.

Greening is optional. The longer the sprouts remain in the light, the greener they'll become.

Paper towel method

Equipment

- glass tray or stainless steel pan with draining rack
- paper towels

Procedure. Place the rack inside the tray. The rack makes it possible for the air to circulate more freely around seeds. Soak a two-layer thickness of paper towels in water. Squeeze out excess water. Spread the damp towels over the rack, leaving room at the edge of the rack for air circulation. Scatter presoaked seeds evenly over the surface of the towels.

Cover loosely with another double thickness of moist towels. Slip container into a plastic bag, leaving the end open for air circulation. Place in a dark cupboard, leaving the door slightly ajar.

To water the seeds, remove the top layer of towels. Sprinkle the seeds with water and resoak the top layer of towels, squeezing out excess moisture each time. Water only enough to provide a moist towel surface.

You can also roll towels loosely around the sprouts, then place them on end. This may lead to longer, straight sprouts. Once your sprouts have grown, you may wish to place them in the light for "greening."

Sprinkle method

Equipment

- glass tray, glass pie plate, or stainless steel pans
- aluminum foil or plastic wrap

Procedure. Don't presoak seeds. This method is designed for seeds that become gelatinous when water is added to them, such as chia seed and garden cress. Gelatinous seeds don't drain well, and they may decay from too much moisture.

Measure equal amounts of water and seed. Pour water into container and sprinkle the seeds evenly over the water. Let seeds stand for about 1 hour, then check them. If they appear dry, sprinkle a little more water over them.

Tip the container slightly and carefully pour off any water that flows to the side. The seeds will have formed a solid jellylike mass and will remain in place if you drain them carefully.

Cover the container with a piece of loosely fitting foil or slip it into a

large, food-grade plastic bag. If you use a bag, leave the end open for air circulation. Keep the container in the cupboard or, if you use a foil covering, in the light.

Sprinkle a small amount of water over the seeds if they appear dry. Once a day is enough, except in hot, dry weather. When the sprouts are the desired length, place in indirect sunlight or artificial light for "greening," if you wish.

Preparing sprouts

After the seeds have sprouted, rinse and clean the sprouts. Place them in a strainer and rinse with a light spray of water to avoid breaking the tender shoots. You could also place sprouts in a large bowl of water.

The seed coats that split as the legume seeds germinate will float; you can remove them. If you wish, you can keep the seed coats as an additional source of fiber in your diet.

To avoid adding extra water to your product, drain the sprouts thoroughly.

Carefully inspect the sprouts before you use them. If you wish, remove the seeds that show no sign of sprouting—they may be hard to chew. You'll usually find them at the bottom of your container. Remove any mushy or broken beans, too.

Thin white "hairs" may appear as sprout rootlets. These "feeder roots" are most common in some of the grains such as rye or wheat. Separate the tangled roots gently after rinsing.

Storing sprouts

Refrigerate sprouts immediately after they reach their peak for harvesting. First, rinse them lightly in cold water, drain them thoroughly; then wrap them loosely in a single layer of damp paper towel. Place them in a plastic bag and seal tightly.

If sprouts begin to wilt or dry out, you can rinse them again in cold water, rewrap, and refrigerate. Most sprouts last 7 to 10 days in your refrigerator.

Recipe ideas

The most common uses for sprouts are as ingredients in salads, hot or cold sandwiches, and in stir-fried dishes. Sprouts help you to be creative—they add crunchiness and new flavors to traditional salads, sandwiches, and other food items. Add sprouts to a favorite green salad or substitute them entirely for the greens.

The best way to cook soybean sprouts or other bean sprouts is to steam them in a steamer or a colander over medium heat for 5 to 15 minutes, or until tender.

If you can't steam sprouts, you could simmer them gently for 5 to 15 minutes. Steaming is better because the sprouts are less likely to break.

Stir-frying sprouts in a small amount of oil is another popular technique, particularly for Oriental dishes. You can add about ½ to 1 cup of raw sprouts to a favorite casserole and bake the casserole as usual.

Some recipes call for a specific quantity of sprouts. Be certain the sprouts are well drained. Measure sprouts before cooking by pressing them *lightly* into a measuring cup until the desired amount is reached. If

you press sprouts too tightly, they may crush or break.

If a recipe calls for a specific type of sprout, you can still substitute different ones. In salads, soups, and sandwiches, it rarely makes a difference if you make a substitution. But remember: Different sprouts do taste differently—a substitution might affect your dish's final taste.

You can enhance many home-baked goods by adding sprouts. Substitute 1 cup sprouts for ½ cup flour and ½ cup liquid in many recipes. Chop the sprouts or leave them whole—breads become particularly attractive with sprouts throughout the loaf.

When you add sprouts to a yeast bread, add them as late as possible in the mixing process. Young sprouts are particularly rich in enzymes. Some enzymes have the ability to digest protein, which could inhibit the yeast action.

For further reading

Blanchard, M.P., The Sprouter's Cookbook for Fast Kitchen Crops (Charlotte, VT: Garden Way Publishing, 1975).

Courter, G., *The Beansprout Book* (New York: Simon and Schuster, 1973).

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