



Fingerling potato harvest from a Carbon County garden at the end of the season. Photo by Abby Perry.

# WY potatoes? (No, that's not a typo)

## Grow a healthy, versatile crop that's well suited to Wyoming

**G**lancing at the title of this article, you may be thinking, I think you meant, “Why potatoes?” No mistake, this is an article about why everyone in Wyoming should be growing more potatoes, and how to do it successfully.

While many people associate potatoes with fast food or highly processed snacks, potatoes are high in potassium and vitamin C, along with good levels of protein, iron, vitamin B6, and magnesium.

### **Are potatoes healthy?**

The term couch potato came from somewhere, right? It's true, Americans tend to eat a lot of fried or highly processed potatoes, which can have negative health impacts.

Potatoes are healthy for us when they are prepared healthfully. For healthy recipes and nutrition tips from UW Extension's Cent\$ible Nutrition Program, visit <https://bit.ly/cnp-potato>.

## Wyoming potatoes boost food security

Since 2021, UW Extension's Cent\$ible Nutrition Program (CNP), the James C. Hageman Sustainable Agriculture Research and Extension Center (SAREC), and Food Bank of Wyoming have partnered to donate more than 42,000 pounds of potatoes to Wyoming residents facing food insecurity. Volunteers from these partnering organizations, as well as UW students, 4-H members, and others, gather at SAREC for the annual harvest each fall. Food Bank of Wyoming then transports the potatoes to hunger relief organizations across the state.

Potatoes are one of the most versatile vegetables on the planet. Many civilizations owe the potato a great thanks for providing nutrition and sustenance for their people. Potatoes originated in the Andes Mountains of South America. Today, potatoes can be found in every nook and cranny of the globe, feeding people everywhere.

While our western neighbor, Idaho, is better known for potato production, Wyoming's climate and soil are very similar. We can efficiently grow potatoes in certain pockets around the state, or with some assistance.

### Growing potatoes

Potatoes prefer sandy soil, but can be grown in heavier soils, like clay, also. Sandy soils allow the potatoes to expand easily underground and form nice round tubers. Heavy soils can cause smaller, more oddly shaped potatoes (but fret not, oddly shaped potatoes are still edible). Try to avoid rocky soils or those with extreme pH levels.

As with many crops, it is a good idea to periodically rotate planting locations. If you don't have this option, you may need to use certain additives like natural or industrial fertilizer, or peat moss, to help your potatoes along.

### Potato pests

We are relatively insulated from pests like the Colorado potato beetle because of our distance from large commercial operations. If you happen to find Colorado potato beetle in your patch, commercial pesticides and organic control options are available.



Black scurf on potatoes. Photo by Peter Oetelshofen, [stock.adobe.com](https://stock.adobe.com)

An issue we have encountered in the southeast part of the state is a soil- and seed-borne fungus called *Rhizoctonia solani*. *Rhizoctonia* can cause uneven stands of potatoes and weak growth, leading to smaller yields. *Rhizoctonia* will also cause malformed potatoes that can be covered with black scurf, small black patches on the tubers. Black scurf isn't harmful to humans, just a bit unsightly.

To lower your chances of getting *Rhizoctonia*, make sure you get clean seed potatoes or use potatoes that have had seed treatment. If you don't want to use treated potatoes, make sure you plant the potatoes at the correct depth (4–8 inches), since planting too deep can make plants more susceptible. In addition to depth, make sure you rotate your potato patch every year. *Rhizoctonia* can survive in the soil for a long time, infecting future crops.

### Tough tubers

In addition to being nutritionally healthy, potatoes also store well for long periods of time. Almost every early farmstead had a cellar, many of which can still be seen on farms and ranches in Wyoming. Western

## Potato seeds?

Potatoes do produce true seeds, but we use the tubers to start our next crop, because we know the exact kind of variety we will get (the tubers are cloned). By planting a true potato seed, you would get a slightly different version of the original variety, because each new seed developed will be slightly different.

settlers knew that they had to feed their families during harsh winters, and there wasn't exactly a grocery store around every corner.

You may be wondering, "But what makes potatoes last so long?" Good question. Taking the top off a growing potato plant triggers a storage mode in the plant. The tuber is the storage "tank" for the potato plant, and it must be protected to ensure a plant can be produced during the next growing season. When the potatoes are topped, the skins of the tubers start to thicken to protect the water and nutrients in the tuber. The thick skin makes them ideal for storage over a long period of time. Even in the age of readily available grocery stores, potatoes continue to be a shelf-stable shelf staple.

## Potato storage

You may be asking, "But what is the best way to store potatoes?" We know that they are supposed to store for a long time, but what are the ideal conditions? We have all forgotten a bag of potatoes in the pantry, only to find them months later in some state of growth. That growth is the potato trying to start a new plant using the water and nutrients stored inside the tuber.

"Store in cool, dry place" is a common statement found on the packaging of many perishable food items. Well, there is a reason for this, and the same is true for potatoes. If potatoes are stored in a warm place (e.g., your pantry in the warm house), they will think it is time to start growing a new plant.

You may say, "I'll just leave them in the ground, it's plenty cool outside during the winter." If you do this, you will dig up mashed potatoes when you want to go make mashed potatoes. Remember, potatoes are mostly water, and the ground freezes rather quickly here in Wyoming. The ground also will keep moisture up against



Purple potatoes can be a great way to get kids excited about gardening and participating in the harvest. Photo by Abby Perry.

the skin of the potatoes, and too much moisture can encourage spoilage due to rot. The refrigerator is no good either—it's too cool and moist. Instead, find a cool, dry place with a constant temperature, such as a basement or garage.

Storing the potatoes in an airtight container is not ideal because the potatoes will give off a minimal amount of moisture through their skins, creating a moist environment. The ideal container allows a bit of airflow and also spreads out the weight of the potatoes so there isn't too much pressure on the bottom spuds.

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