



# SPUD-Tacular Colorado Potatoes

## What are ways to eat potatoes?

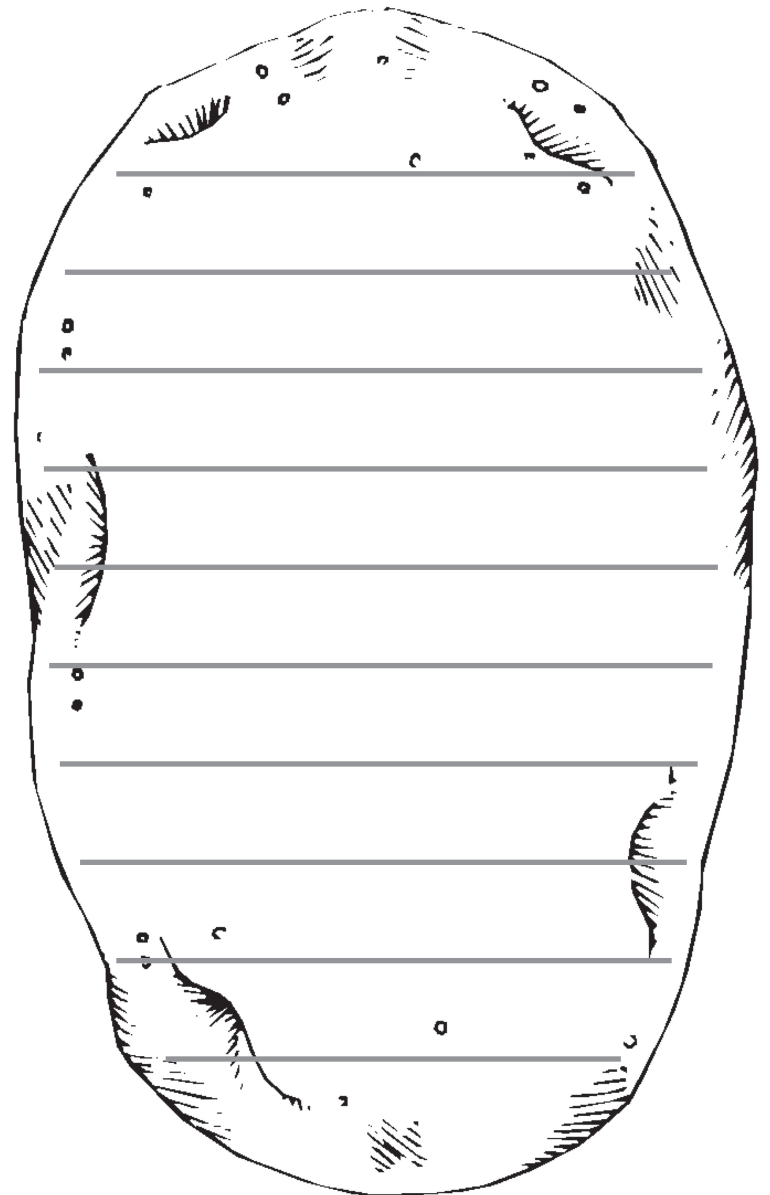
In the lines below, write the different ways you can think of to eat potatoes.

1. Where do potatoes come from? \_\_\_\_\_
2. Are potatoes a tree or a vegetable? \_\_\_\_\_
3. Does the part we eat grow above ground or below? \_\_\_\_\_
4. Are potatoes grown in Colorado? \_\_\_\_\_

The **potato** (*Solanum tuberosum*) is an annual plant that grows up to 100 cm (40 inches) tall. The potato is not a root but a storage area that is part of the plant's underground stem. Vigorous potato plants that have plenty of sunlight, water, and nutrients from the soil produce more energy than the growing plant can use at one time. The plant stores the excess energy in oval packages, called **tubers** (the potatoes). These tubers provide the plant energy to regrow in the spring. When the greenery starts to wither and turn brown, the potatoes are ready to harvest.

Potatoes produce more pounds of protein per acre than corn, rice, wheat, or oats. They are packed with nutrients, low in fat, generous in bulk, and efficiently packaged in their own skins. They can be prepared in many different ways and are delicious.

Colorado produces more than 2 billion pounds of potatoes per year and ranks fifth in the United States for potato production.





# Potatoes Around the World

The potato was first grown by ancient tribes living in the Andes Mountains of Bolivia and Peru as early as 200 A.D. Archaeologists have found pictures of potato plants in designs on ancient pottery. The ancient people preserved the potatoes by trampling them and then drying them.

In 1532, the Spanish conquistadors arrived in Peru and failed to see that the potato was far more important than the silver and gold that they took back to Spain with them. Though the potato was consumed by the ship's crew on the way back to Spain, it did not catch on right away once they got home. By 1570, farmers were planting the crop on their farms, but mostly to feed their animals.

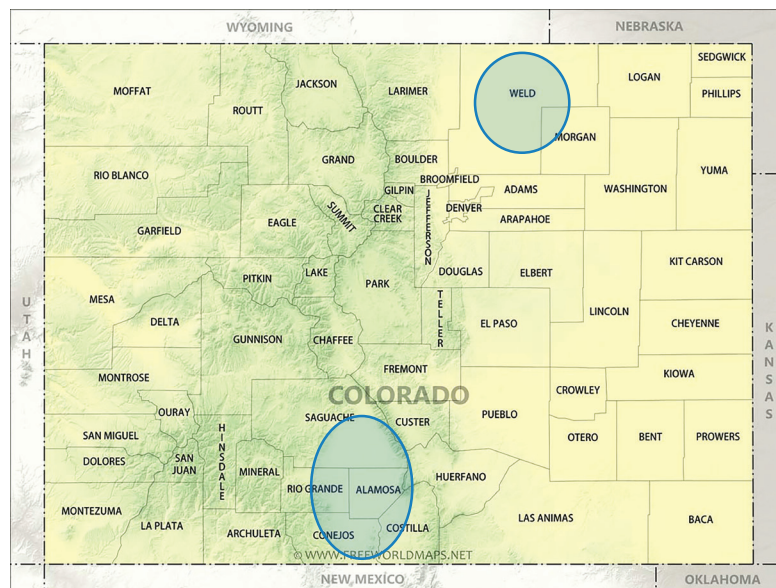
From Spain, the popularity of the potato spread to Italy and other

European countries by the late 1500s. By 1600, the potato entered Belgium, Holland, France, Switzerland, England, Germany, Portugal, and Ireland. Most everyone refused to eat the potato, because they thought it was too UGLY! It wasn't until the upper classes started eating them that they became popular. Then everyone began growing them.

In 1795, the potato invaded England full force and became a part of the food source there. By 1850, potatoes were a part of Russia's diet as well. All over Europe, England, and Ireland the potato had become a big part of everyone's diet. In Ireland, potatoes became a staple food for the people. In the 1840s, disease wiped out the potato crop in Ireland for two years in a row. Many Irish people moved to America then, because they had no food to eat.

When early pilgrims came to America, the potato came too. The potato has become a major part of the American diet. Today, potatoes are grown across the United States.

China produces more potatoes than any other country in the world. In the mountainous regions of northern China, potatoes are both a **staple food** and an important source of income for rural households. In neighboring India, potatoes are less of a rural staple, but they are an important cash crop, providing significant income for farmers. Indian farmers grow potatoes during the winter season when days are shorter. India, Russia, and Ukraine follow China in production, and the United States is the fifth largest producer of potatoes globally. The biggest potato-producing states are Idaho and Washington.



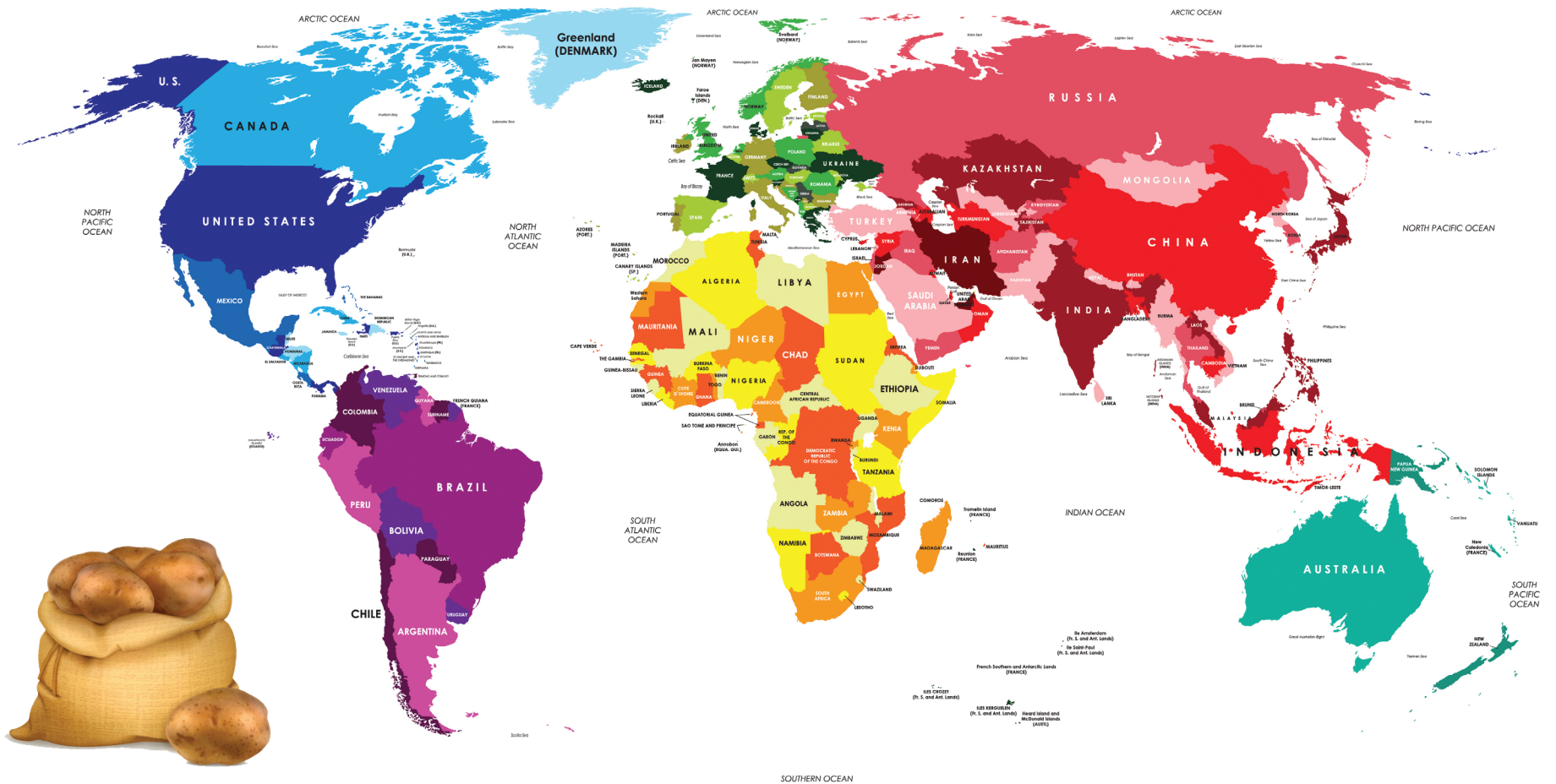
## Where in Colorado?



In Colorado, potatoes are primarily grown in the San Luis Valley in south central Colorado and in Weld County in northeast Colorado.

Colorado's San Luis Valley is the second largest fresh potato growing region in the United States. The San Luis Valley is located between the Sangre de Cristo and San Juan Mountains and has an elevation of 7,600 feet. The climate of the valley has mild temperatures and 350 days of sunshine per year. Once an ancient lake bed, the soil is very fertile. Snow melt from the mountains provides water to the region.

Weld County is a leader in agriculture production, growing many crops, including potatoes, due to its fertile soil and easy access to water to irrigate fields.



**Test Your Knowledge** Using the map above and the story on the left, complete the following activities.

1. Locate Bolivia and Peru on the map. What continent are they in?

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2. Draw an arrow from South America to Europe to show how early explorers brought potatoes to Europe.

3. Draw an arrow from Europe to the United States to show how pilgrims brought the potato to the United States when they settled in North America.

4. What continent is Ireland in? What happened to the potatoes grown in Ireland in the 1840s?

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5. List the top five potato producing countries in the world and draw a star on those countries on the map.

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6. In the United States, label the approximate location of Colorado on the map.

# Growing More with Less

**Sustainability** is a big word and it is an important word to those who grow our food, fiber, and fuel. The word sustainable means meeting the economic, social, and environmental needs of the present without compromising the future. Farmers and ranchers use **sustainable agriculture** methods. This means they

grow more food using less resources. Farmers today use less land and water to grow more food than what they did decades ago. Farmers also work to protect our environment and natural resources.

Potato growers are no different. Below, read some of the ways potato farmers are sustainable.

Potato farms are certified for food safety. This means farmers meet requirements for safe food production and handling practices.

Precision farming technologies using **Global Positioning Systems (GPS)** reduce the farm's usage of energy, water, and other inputs.

U.S. growers care for their soil year-round to build healthy soils. They add compost, rotate the type of crops planted each year, and grow **cover crops** that add nutrients back to the soil.

New irrigation technology to water the potato plants in the field conserves water and reduces evaporation.

Potato growers use non-chemical methods to manage pests. They grow potato varieties that are resistant to pests.

Potato growers are known for planting another crop next to the potato plants. This is called companion crops or companion planting. Companion crops help increase potato yields, reduce pests, control weeds, and limit soil erosion.

U.S. growers use fertilizer and pesticides in limited amounts to guarantee the wholesomeness of their potatoes.

# Meet the Mitchell Family

Who better to learn more about growing potatoes than a potato grower? We asked Tyler Mitchell from Monte Vista, Colorado to help us with this question and answer profile.

## **Q. Tell us about you and your family.**

My name is Tyler Mitchell and I have been back on the family farm for 14 years. I am married to my wife Melissa and together we have two children, Madeline who is 13 years old and Sophia who is 11.

## **How long has your family been growing potatoes?**

My family has been growing potatoes in the San Luis Valley for over 80 years. I am a third generation farmer. My grandfather and his brother began growing potatoes together in the late 1930s. My dad Mike recently retired and turned the reins over to my brother Clay and I.

## **What do you like best about growing potatoes?**

Potatoes are a lot of fun to grow. My favorite part is seeing the change in the size of the potatoes underground

week to week. We dig up a plant out of the soil so we can check on their progress.

## **What makes the San Luis Valley a unique region for growing potatoes?**

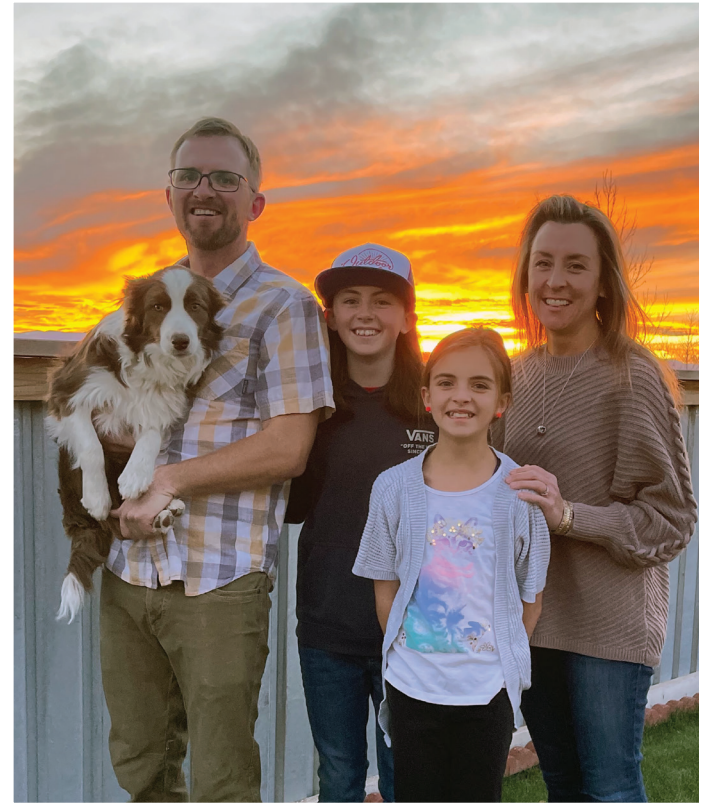
Potatoes grow well in the San Luis Valley because we have moderate temperatures in the day time and cool nights. Potatoes really like those climate conditions. Also, we have abundant sunshine in the San Luis Valley that really helps them grow.

## **What does sustainability mean to you as a potato grower?**

Sustainability to me is taking care of the soil, being as input efficient as possible, and being involved in the local community as well as the national potato producing community. Doing all of these things will allow the farm to continue on for many more generations.

## **What is your favorite way to eat potatoes?**

Roasted with olive oil, salt, and pepper.



## **Colorado Potato Fun Facts!**

There are over 70 unique varieties of Colorado potatoes!

50,000 to 65,000 acres of potatoes are planted in Colorado each year! That's around 78 square miles, or enough to cover all of Washington D.C. (68 mi<sup>2</sup>) in potato fields, and then some!

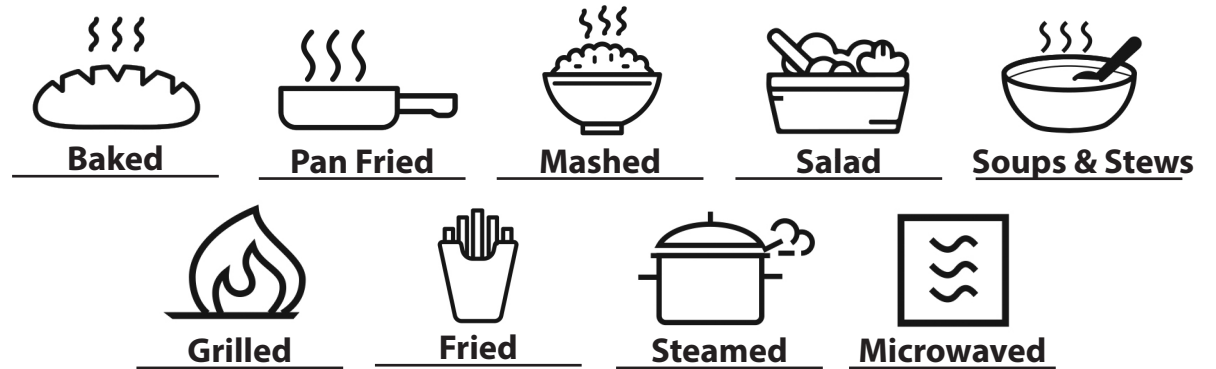
Potatoes have been farmed in Colorado since 1875. In that year, Ulysses S. Grant was president, and the very first recorded hockey game and Kentucky Derby happened.

# A Plethora of Potato Types

There are thousands of varieties of potatoes. More than 200 varieties are sold throughout the United States. Each of these varieties fit into one of seven potato type categories: russet, red, white, yellow, blue/purple, fingerling, and petite. Potatoes can fuel the body and brain throughout the day. Easy to prepare and pair with a variety of foods, potatoes are a simple food option to fuel your workouts. Potatoes can even be cooked in 30 minutes or less.

## Potato Types and Preparation Styles

As you explore the different types of potatoes listed on these two pages, take note of the preparation style icons pictured with each potato type. Use the key below to fill in the blank for the correct icon for how best to serve each potato type.



## Russet Potatoes

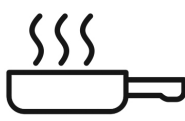


### Appearance:

medium to large; oblong or slightly flattened oval; light to medium brown russet-brown; netted skin; white to pale yellow flesh

**Texture:** floury, dry; light and fluffy; hearty skin that is chewy when cooked

**Flavor:** mild; earthy; medium sugar content



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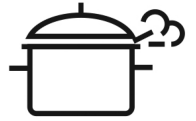
## Red Potatoes



**Appearance:** small to medium; round or slightly oblong; smooth, thin red skin; white flesh

**Texture:** waxy, moist and smooth; creamy

**Flavor:** Subtly sweet; mild medium sugar content



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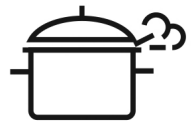
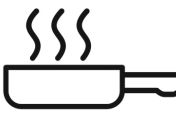
## White Potatoes



**Appearance:** small to medium; round to long shape; white or tan skin; white flesh

**Texture:** medium starch; slightly creamy, slightly dense; thin, delicate skin

**Flavor:** subtly sweet; mild; low sugar content



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## Yellow Potatoes

**Appearance:** marble to large size; round or oblong shape; light tan to golden skin; yellow to golden flesh

**Texture:** slightly waxy, velvety, moist

**Flavor:** subtly sweet; rich; buttery; medium-sugar content



## Blue/Purple Potatoes

**Appearance:** small to medium-size; oblong to fingerling; deep purple, blue or slightly red skin; blue, purple lavender, pink or white flesh

**Texture:** moist; firm flesh. Note—all blue and purple Peruvian varieties have higher starch content and a floury texture

**Flavor:** earthy, nutty, low sugar content

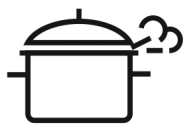
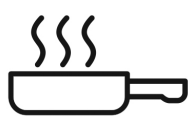


## Fingerling Potatoes

**Appearance:** 2-4 inches long; finger-shaped or oblong; red, orange, purple or white skin; red orange, purple, yellow or white flesh—sometimes streaked with veins of color

**Texture:** waxy, firm

**Flavor:** buttery; nutty; earthy; medium sugar content



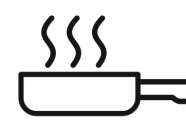
## Petite Potatoes



**Appearance:** these small, bite-sized potatoes are oftentimes referred to as pearls or marble-size

**Texture:** they are the same skin and flesh color as their larger-sized cousins, as well as the shape, texture and sugar content

**Flavor:** similar but with a more concentrated flavor to their larger-sized cousins

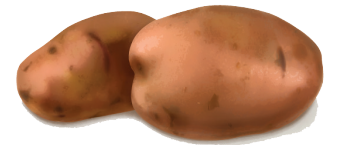


## Potato Recipes



Are you looking for fun, new ways to prepare potatoes? There are MILLIONS of potato recipes. Ask an adult to help you do an internet search for *potato recipe*. Two great sources for delicious potato recipes are: **ColoradoPotato.org** and **PotatoGoodness.com**. Be adventurous! Try a type and style you've never had before.

# Powered by Potatoes



Potatoes are more energy-packed than any other popular vegetable. Potatoes are also fat-free, gluten-free, plant-based, affordable, and a quality carbohydrate. They are also cholesterol-free and sodium-free, with only 110 calories per 5.3 ounce serving. By choosing potatoes, students can take simple steps toward eating healthier across every stage of life. Take a look at how potatoes fuel your day. Use the nutrition label to fill in the number of grams and the percent (%) daily value each nutrient provides.

## Carbohydrates

Carbohydrates are a key source of energy for muscles to help you fuel, perform, and recover. Carbohydrates are also important for optimal physical and mental performance.

Grams: \_\_\_\_\_ % Daily Value: \_\_\_\_\_

## Vitamin C

Potatoes are considered to be an excellent source of this antioxidant. Vitamin C aids in collagen production - a major component of muscle tissue - and supports iron absorption.

Grams: \_\_\_\_\_ % Daily Value: \_\_\_\_\_

## Fiber

Dietary fiber has been shown to have numerous health benefits, including improving blood lipid levels, regulating blood glucose and increasing satiety.

Grams: \_\_\_\_\_ % Daily Value: \_\_\_\_\_

<b>Nutrition Facts</b>	
1 serving per potato	
<b>Serving size 1 potato (148g/5.3oz)</b>	
<b>Amount per serving</b>	
<b>Calories</b>	<b>110</b>
	<b>% Daily Value*</b>
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 0mg	<b>0%</b>
<b>Total Carbohydrate</b> 26g	<b>9%</b>
Dietary Fiber 2g	<b>7%</b>
Total Sugars 1g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 3g	
Vitamin D 0mcg	0%
Calcium 20mg	2%
Iron 1.1mg	6%
Potassium 620mg	15%
Vitamin C 27mg	30%
Vitamin B <sub>6</sub> 0.2mg	10%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

## Potassium

Potassium is an electrolyte essential for muscle functioning. Potassium is lost in sweat, so it needs to be replenished for optimal performance.

Grams: \_\_\_\_\_ % Daily Value: \_\_\_\_\_

## Iron

Iron is a mineral involved in making proteins that carry oxygen to all parts of the body, including to the muscles.

Grams: \_\_\_\_\_ % Daily Value: \_\_\_\_\_

## Vitamin B6

Vitamin B6 plays important roles in carbohydrate and protein metabolism.

Grams: \_\_\_\_\_ % Daily Value: \_\_\_\_\_

## Protein

Protein is a key component of muscle and an important nutrient for athletic performance.

Grams: \_\_\_\_\_

Source: PotatoUSA.org



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