

POTASSIUM BASICS

Potassium is a major mineral that plays a number of important roles in the body. Most notably, it is a key electrolyte that helps maintain the delicate balance of fluid inside and outside the cell.¹ It is estimated that less than 3% of Americans are meeting the current adequate intake (AI) for potassium as specified by the USDA's Dietary Guidelines for Americans.² In fact, the 2015 Dietary Guidelines mention potassium as an under-consumed nutrient of concern, and recommend consuming foods that are good sources of potassium, such as white potatoes.³

KEY FACTS

- Potassium is an important electrolyte that aids in muscle, cardiovascular and nervous system function.¹
- Potassium helps maintain normal blood pressure. Research suggests diets high in potassium and low in sodium may reduce the risk of hypertension and stroke.²
- Potatoes with skin-on are a good source of potassium. A medium-size (5.3 ounce) potato with skin-on provides 620 milligrams of potassium which is 13% of the recommended daily value. This is more potassium than in a medium-size banana.³
- Potatoes provide one of the most affordable sources of potassium, significantly more than those foods commonly associated with being high in potassium, including bananas, oranges and mushrooms.²

Guidelines for Americans encourages people to increase potassium by focusing on food choices with the most potassium such as white potatoes, beet greens, white beans, plain yogurt, and sweet potatoes.⁵

POTASSIUM RECOMMENDATIONS

Current recommendations for potassium intake are expressed as an "adequate intake," or AI, because there was insufficient evidence to establish an estimated average requirement (EAR) and subsequently, a recommended dietary allowance (RDA). The AIs for potassium for all ages are based on the highest median potassium intakes in healthy children and adults, and on estimates of potassium intakes from breast milk and complementary foods in infants. For males 19-50 years of age, the AI for potassium is 3400 mg per day whereas for females 19-50 years of age it is 2600 mg per day.⁷

FOOD SOURCE	POTASSIUM (MG)
Potato (1, 5.3 oz)	620
Broccoli (1 med stalk)	460
Banana (1 med)	450
Sweet Potato (1 med)	440
Tomato (1 med)	340
Mushrooms (5 med)	300
Orange (1 med)	250
Cantaloupe (1/4 med)	240
Grapefruit (1/2 med)	160

FUNCTIONS OF POTASSIUM AND RELEVANT RESEARCH

Research suggests diets rich in potassium and low in sodium reduce the risk of hypertension and stroke.⁵ In a scientific statement promoting dietary approaches to prevent and treat hypertension, the American Heart Association (AHA) reported that evidence from animal experiments, observational studies and more than 30 human clinical trials show a significant association between high potassium intakes and reduced blood pressure.⁶

Given their high potassium content, potatoes may contribute to a heart healthy diet. In fact, the Dietary

REFERENCES

1. Institute of Medicine. 2004. Dietary Reference Intakes: Water, Potassium, Sodium, Chloride, and Sulfate. Washington, DC: The National Academies Press. <https://ods.od.nih.gov/factsheets/Potassium-HealthProfessional/>
2. Drewnowski A, Rhem CD. Vegetable cost metrics show that potatoes and beans provide most nutrients per penny. *PLoS One*, 2013;15:8(5).
3. USDA Dietary Guidelines for Americans. Available at: <https://health.gov/dietaryguidelines/2015/guidelines/chapter-2/a-closer-look-at-current-intakes-and-recommended-shifts/>
4. Potassium: Food Sources Ranked by Amounts of Potassium and Energy per Standard Food Portions and per 100 Grams of Foods. Available at: <http://health.gov/dietaryguidelines/2015/guidelines/appendix-10/>.
5. Aaron KJ, Sanders PW. Role of dietary salt and potassium intake in cardiovascular health and disease: a review of the evidence. *Mayo Clin Proc*. 2013;88:987-995.
6. Appel LJ, Brands MW, Daniels SR, Karanja N, Elmer PJ, Sacks FM. Dietary approaches to prevent and treat hypertension. A scientific statement from the American Heart Association. *Hypertension*. 2006;47: 296-308.
7. National Academies of Sciences, Engineering, and Medicine. Dietary Reference Intakes for Sodium and Potassium. Washington, DC; The National Academies Press; 2019.