

The Science Behind Canned Food



Consumers want more nutritional choices.

Consumers were relieved to know that canned and frozen fruits and vegetables counted toward their dietary goals.¹



Canned foods provide needed nutrients.



- Choosing one form of fruit or vegetable over another ignores the benefits that each form provides and limits consumer choice. All forms — canned, fresh, frozen and dried — of the fruits and vegetables provide important nutrients.²
- The canning process locks in nutrients at their peak of freshness, and due to the lack of oxygen during the storage period, canned fruits and vegetables remain stable up until the time they are consumed. This means they have a longer shelf-life, which helps reduce waste from spoilage.²
- Beans are an excellent source of fiber and folate as well as a good source of protein, iron, potassium and magnesium. Studies also note the darker the bean's color, the more antioxidants they have.
- From a nutrition and sensory standpoint, recipes prepared with canned ingredients and those prepared using cooked fresh and/or frozen ingredients rate comparably.³
- Canned foods are comparable to cooked, fresh and frozen varieties in their nutrient contribution to the American diet.⁴

Some canned foods contribute more antioxidants than fresh and frozen.

- A study demonstrated increased amounts of some key anthocyanins, a powerful antioxidant, in canned blueberries, compared to the amounts in fresh and frozen blueberries.⁵
- Canned poultry and fish are comparable to their fresh-cooked counterparts in nutritional value. Some varieties of canned fish tend to have higher calcium levels than freshly cooked counterparts.⁶ For example, canned salmon is rich in omega-3 fatty acids, and better for you when canned because it has more calcium. Also, some of the fat is removed, making it a healthier option.⁴
- Canned tomatoes, carrots, spinach, corn and pumpkin are rich in antioxidants. One-half cup of canned tomatoes provides 11.8 milligrams of lycopene compared to just 3.7 milligrams found in one medium fresh, uncooked tomato.⁷
- Mild-heat treatment of carrots and spinach, as used in commercial canning, enhances the bioavailability of carotene, which is converted to vitamin A in the body.⁷
- The absorption of lutein in corn, an antioxidant that may reduce the risks of cataracts and macular degeneration, is enhanced by heat from the canning process.⁷
- Canned pumpkin is loaded with beta carotene, a substance from plants that converts to vitamin A and is said to protect against certain types of cancer and heart disease. One-half cup of canned pumpkin contains three times more Vitamin A than one-half cup of fresh, cooked pumpkin.⁷



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Fiber is unchanged regardless of fruit or vegetable form.

- The USDA database shows that fresh, frozen and canned fruits and vegetables contained similar amounts of fiber. Overall, canned fruits and vegetables were never consistently lower than cooked fresh or frozen products for *any* nutrient.⁷



Canned fruits and vegetables do not contribute significantly to sugar and sodium intake.

- Most canned fruits and fruit juices contribute less than two percent of added sugars in most American's diets and canned vegetables contribute less than one percent of sodium.⁸

Canned foods are a safe option that reduces the risk of food borne illness.

- In a review of nearly 4,500 food-borne-related outbreaks and more than 138,500 cases of illness, commercially produced canned fruits and vegetables did not directly account for a single food borne outbreak.⁹
- The steel food can is one of the safest types of food packaging — it is tamper resistant, provides an airtight seal, is thermally sterilized and shelf stable.¹⁰



(Endnotes)

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10. FDA's Center for Food Safety and Applied Nutrition, Centers for Disease Control and Prevention, Moffett Center – National Center for Food and Safety Technology, FDA, Journal of Food Protection, International Journal of Food Microbiology, International Journal of Food Science and Technology, U.S. Department of Health and Human Services, United States Department of Agriculture (US DHHS/USDA), Iowa State University Extension, USA Today, Food Chemical News, Chicago Daily Herald, Canadian Food Inspection Agency, Packaging Glossary, Food Product Design, National Institute for Health and USDA Food Safety and Inspection Service

The Canned Food Alliance, a National Strategic Partner of the U.S. Department of Agriculture's Center for Nutrition Policy and Promotion, is a consortium of steelmakers, can manufacturers, food processors and affiliate members that have joined together to drive increased consumption of canned foods by enhancing the perception of their numerous benefits, including nutrition, convenience, affordability and accessibility. For more information about canned food research, facts, resources, the canning process, family mealtime solutions, recipes that use canned foods and more, visit Mealtime.org.

