Canned Foods: Frequently Asked Questions

Nutrition

Do canned fruits and vegetables have the same nutrients as fresh or frozen?
Yes! In fact, studies conducted by researchers at Michigan State University, University of California at Davis and Oregon State University all concluded that canned foods have similar (or better) nutritional profiles as their fresh or frozen counterparts.\(^1\)\(^-\)\(^4\) For example, canned tomatoes have more lycopene, which is associated with reducing cancer risk and has more B vitamins than fresh tomatoes. Canning also helps make fiber in certain vegetables, like beans, more soluble and therefore more useful to the human body.

Do canned foods lose their nutritional value the longer they are stored?
No. When foods go through the canning process, nutrients are locked in so the amount of vitamins and nutrients in the food is the same on the day it was canned as it is a year from the canning date. Fresh produce loses nutritional value day by day, and even frozen fruits and vegetables experience nutrient loss through oxidation.

Given the choice, should fresh fruits and vegetables always be first choice?
At a time when only 24 percent of adults are meeting their dietary requirements for fruits and only 13 percent are meeting recommendations for vegetables,\(^5\) increasing intake in any form is strongly encouraged. Experts agree that eating more fruits and vegetables – whether canned, frozen, fresh or 100% juice – is an essential part of a healthy diet. Canned options should not be overlooked, given that canned foods are comparable to and in some cases better options nutritionally and economically.\(^1\) Furthermore, they are an excellent option for the 23.5 million Americans who live in food deserts.\(^6\)

Do the government and public health experts encourage canned food consumption?
Canned fruits, vegetables and proteins are recommended in a variety of food and nutrition policies and initiatives including the 2015-2020 Dietary Guidelines for Americans,\(^7\) Let’s Move!,\(^8\) the U.S. Thrifty Food Plan,\(^9\) American Heart Association,\(^10\) Academy of Nutrition and Dietetics,\(^11\) and the National Heart, Lung and Blood Institute’s DASH diet.\(^12\)

Are canned foods high in sodium and added sugar?
Canned fruits and vegetables boost nutrients, not sodium and sugar. An analysis, published in Nutrients, shows that adults and children who ate 6+ canned food items over two weeks were more likely to meet or exceed their recommended daily allowance for 17 essential nutrients than those who ate 1-2 canned food items over the same two-week period.\(^13\)

An additional study found that children and adults who consume canned fruits and vegetables have overall better diet quality and greater fruit and vegetable intake.\(^14\)

Plus, the 2015-2020 Dietary Guidelines for Americans also reported that only 2 percent of added sugar in the diet comes from fruits and vegetables, including canned options. And only 11 percent of sodium comes from vegetables.\(^7\)

What type of canned foods are a good source of key nutrients and vitamins?
According to the 2015-2020 Dietary Guidelines for Americans, a variety of canned foods are a great source of potassium, dietary fiber, calcium and vitamin D – all nutrients of concern.\(^7\)

### Selected Food Sources Ranked by Amounts of Key Nutrients/Vitamins and Calories Per Standard Food Portion

<table>
<thead>
<tr>
<th>Rank</th>
<th>Food</th>
<th>Potassium</th>
<th>Dietary Fiber</th>
<th>Calcium</th>
<th>Vitamin D</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Prune juice, canned</td>
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<td>3</td>
<td>Carrot juice, canned</td>
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<td>5</td>
<td>Tomato paste, canned</td>
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<td>8</td>
<td>White beans, canned</td>
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<tr>
<td>13</td>
<td>Clams, canned</td>
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<tr>
<td>16</td>
<td>Tomato juice, canned</td>
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<tr>
<td>22</td>
<td>Vegetable juice, canned</td>
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<tr>
<td>23</td>
<td>Chili with beans, canned</td>
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<td>24</td>
<td>Great northern beans, canned</td>
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<tr>
<td>36</td>
<td>Spinach, canned</td>
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<td>43</td>
<td>Refried beans, canned</td>
<td></td>
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<tr>
<td>48</td>
<td>Tomato sauce, canned</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

10 Chickpeas, canned
18 Great northern beans, canned
19 White beans, canned
26 Baked beans, canned, plain
33 Green beans, canned
34 Refried beans, canned
45 Pumpkin, canned
19 Sardines, canned in oil, drained
1 Salmon, sockeye, canned
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Affordability

Why are fresh and frozen vegetables more expensive than canned?
Many factors play a role in the cost of fresh vegetables, including seasonality, transport and something called edible weight. For example, all the corn in a can is edible, however the cob of a fresh ear of corn is not consumable, yet you still pay for it. The Michigan State University analysis found that in general canned vegetables can be as low as 50 percent of the costs of frozen alternatives and as low as 20 percent of the cost of fresh with virtually no sacrifices in nutritional quality.1

What is the cost differential between fresh, frozen and canned fruits and vegetables?
The cost between fresh, frozen and canned fruits and vegetables varies depending on the type of fruit or vegetable, but overall canned fruits and vegetables offer a decided economic advantage. For example, the Michigan State University analysis found that fresh green beans are about 500 percent more expensive than canned.1 In addition, Americans waste approximately 15 to 20 percent of fresh fruits and vegetables every year.15

Safety and Storage

Are canned foods safe to eat?
Yes. The high heat canning process is one of the safest when it comes to preserving food because it prevents the growth of microorganisms that cause foodborne illnesses.

How long can canned foods be stored?
In general, the canned foods purchased today are good for at least one year. It’s important to remember that “best by” or “use by” dates have nothing to do with food safety, but rather food quality and when a product may pass its peak of taste.

Are foods in dented cans safe to consume?
Food in cans with small dents (no deeper than a finger) is safe to eat, as long as the dent is in the side of the can and not in the seam. Dents along the seams of a can may damage the seal and allow bacteria to enter, so should be discarded. But food in cans with small dents and without sharp points is perfectly safe to eat.

Are canned foods safe to consume given that Bisphenol A (BPA) is in them?
Yes! The leading U.S. and international food safety agencies have evaluated the extensive body of science and continue to affirm its safety in food packaging. More specifically, the U.S. Food and Drug Administration;16 World Health Organization;17 European Food Safety Authority;18 Health Canada;19 and other global agencies responsible for food products confirmed that BPA in the marketplace today poses no risk to consumers. BPA-lined cans have been effectively safeguarding the global food supply since they were first introduced in the 1960s, without a single incident of foodborne illness associated with canned foods since inception.

Why is BPA used by can manufacturers?
BPA is used to create linings for cans that maintain the integrity of the can, prevent contamination and maintain the safety of the food. More specifically, can linings play an important functional role, safeguarding foods from microbial contamination. And, can coatings prevent perforation defects in the can that would allow bacteria and microorganisms to enter, thereby maintaining the integrity of the can and protecting against food poisoning and foodborne illness.

Why is BPA safe for canned food packaging, but it’s banned in baby bottles?
Leading food safety agencies around the world – including in the United States, Canada and Europe – have reaffirmed the safety of BPA in food packaging.16–19 Baby bottle manufacturers voluntarily announced the removal of BPA as part of their marketing and advertising efforts, and the U.S. Food and Drug Administration (FDA) supports the industry’s decision.16 It did not, however, ban the use of BPA in baby bottles and sippy cups – this is a common misperception that was propagated by many major news outlets. Furthermore, according to the FDA’s National Center for Toxicological Research (NCTR), which has been conducting in-depth studies on BPA since 2008, exposure to BPA in human infants is from 84 to 92 percent less than previously estimated.16

Are acidic foods more likely to absorb BPA?
No. According to a study published in Environmental Science & Technology in 2010,20 the acidity of foods did not appear to affect detectable BPA levels.
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Sustainability

How do canned foods impact the environment?
Metal cans are endlessly recyclable making canned foods an environmentally friendly choice. In fact, steel food cans are the most recycled package in America today, with a recycling rate that is more than 2.5 times higher than that of most other packaging options. Cans can be recycled again and again, forever, without loss of strength or quality.

How do canned foods help reduce waste and costs?
Americans throw away approximately 15 to 20 percent of the fresh fruits and vegetables they purchase every year. Canned food portion sizes are just right for both individuals and families, and most recipes are designed around these sizes. Plus, consumers can cut costs two ways: eliminating the waste of unconsumed fresh produce or spoiled protein, and paying less for canned products at the grocery store. Additionally, metal cans are endlessly recyclable.

Cooking

How do canned foods get people cooking?
Canned foods provide a unique solution for healthier eating in today’s fast-paced world. They mean less prep and year-round availability, making healthy, homemade meals a reality, more often.

How does the canning process impact the food?
Canned fruits and vegetables, including beans, are a nutritious alternative to fresh because canning technology keeps food fresh and flavorful. Consumers can rely on cans for consistency and taste because the food that comes out is just as good as the day it went in. Check out the “Lifecycle of a Pea” infographic for a great tool on helping consumers understand this canning process.

References
5. U.S. Centers for Disease Control and Prevention. Adults Meeting Fruit and Vegetable Intake Recommendations — United States, 2013. Washington, DC. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6426a1.htm