



ERS *Report Summary*

Economic Research Service

February 2011

U.S. Department of Agriculture



This is a summary
of an ERS report.

Find the full report at
[www.ers.usda.gov/
publications/eib71](http://www.ers.usda.gov/publications/eib71)

How Much Do Fruits and Vegetables Cost?

**Hayden Stewart, Jeffrey Hyman, Jean C. Buzby, Elizabeth Frazão,
and Andrea Carlson**

What Is the Issue?

Federal dietary guidance advises Americans to consume more vegetables and fruits because most Americans do not consume the recommended quantities or variety. Food prices, along with taste, convenience, income, and awareness of the link between diet and health, shape food choices. This research updates previous estimates of vegetable and fruit prices, and estimates the cost of satisfying recommendations for adult vegetable and fruit consumption in the *2010 Dietary Guidelines for Americans*.

What Are the Major Findings?

We estimated the average retail prices of 153 fresh and processed vegetables and fruits, where processed includes frozen, canned, and dried vegetables and fruits as well as 100% fruit juice. We also estimated the average price per edible cup equivalent for each vegetable and fruit. This is the consumption unit used in the *2010 Dietary Guidelines for Americans*, and measures only the edible portion of a food once it has been cooked or otherwise prepared for consumption. In 2008:

- An adult on a 2,000-calorie diet could satisfy recommendations for vegetable and fruit consumption (amounts and variety) in the *2010 Dietary Guidelines for Americans* at an average cost of \$2 to \$2.50 per day, or approximately 50 cents per edible cup equivalent.
- The lowest average price for any of the 59 fresh and processed fruits included in the study was for fresh watermelon, at 17 cents per edible cup equivalent. The highest average price was for fresh raspberries, at \$2.06 per edible cup equivalent.
- The lowest average price for any of the 94 fresh and processed vegetables included in the study was for dry pinto beans, at 13 cents per edible cup equivalent. The highest average price was for frozen asparagus cuts and tips, at \$2.07 per edible cup equivalent.
- Processed fruits and vegetables were not consistently more or less expensive than fresh produce. Canned carrots (34 cents per edible cup equivalent) were more expensive than whole fresh carrots eaten raw (25 cents per edible cup equivalent). However, canned peaches (58 cents per edible cup equivalent) were less expensive than fresh (66 cents per edible cup equivalent).

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

www.ers.usda.gov

- Retail prices per pound often varied substantially from prices per edible cup equivalent. Fresh broccoli florets and fresh ears of sweet corn both sold for around \$1.80 per pound at retail stores, on average. After boiling and removing inedible parts, however, the sweet corn cost almost twice as much as the broccoli florets (\$1.17 vs. 63 cents per edible cup equivalent).

Costs in the study are defined as the average prices paid by all American households for a food over a 1-year period, including purchases in different package sizes, under different brand names, and at different types of retail outlets (including, among others, supercenters such as Wal-Mart, wholesale club stores such as Costco, “traditional” grocers such as Safeway, Kroger, and Albertsons, and convenience stores).

How Was the Study Conducted?

We used 2008 Nielsen Homescan data to calculate the average price of a pound (or, for juices, a pint) of 153 fresh and processed fruits and vegetables at retail stores. In order to estimate price per edible cup equivalent for each food, retail quantities were adjusted for the removal of inedible parts and cooking that occur prior to consumption. For example, 1 pound of store-bought fresh pineapple yields 0.51 pound of edible pineapple. Data from the USDA National Nutrient Database for Standard Reference (Release 21) and USDA’s *Food Yields Summarized by Different Stages of Preparation* were used to estimate edible weights. The MyPyramid Equivalents Database, 2.0 was used to define edible cup equivalents.