

Summary

An increase in the price of fruits and vegetables relative to less healthy foods could reduce consumers' incentives to purchase fruits and vegetables and result in less healthy diets. Whether such a change in relative prices and incentives has occurred in the United States is difficult to prove because of substantial quality improvements in many fresh fruits and vegetables. For commonly consumed fresh fruits and vegetables for which quality has remained fairly constant, analysis of price trends reveals a price decline similar to that of dessert and snack foods. This price trend evidence suggests that the price of a healthy diet has not changed relative to an unhealthy one, although a healthy diet might not include every fresh fruit or vegetable currently available.

What Is the Issue?

In theory, it should be easy to compare food prices from a time when Americans were thinner to current prices and demonstrate whether relative prices of healthy and less healthy foods have changed. In practice, an increase in the relative prices of fresh fruits and vegetables is difficult to prove. Standard price comparisons using Consumer Price Index (CPI) numbers suggest that prices of fresh fruits and vegetables have increased relative to prices of other foods. However, these numbers have been shown to overstate the rate of price increase for many types of foods, and especially for fresh fruits and vegetables. A primary reason is the difficulty in accounting for quality changes, like year-round availability and convenient pre-washed packaging. The question remains whether prices of fresh fruits and vegetables have increased over time, holding quality constant.

What Did the Study Find?

Bureau of Labor Statistics' (BLS) average food price data—not index numbers—reveal that, relative to dessert and snack foods, prices have remained stable for a variety of fresh fruits and vegetables that have not had substantial quality improvements and were commonly consumed in the 1980s. Inflation-adjusted price trends for these largely unchanged fruits and vegetables show patterns similar to those of the less healthful foods: prices for healthy and unhealthy foods declined at about the same rate relative to all other goods.

Specifically, from 1980-2006, inflation-adjusted prices of chocolate chip cookies, cola, ice cream, and potato chips fell by an average of 0.5-1.7 percent each year. During the same period, inflation-adjusted prices of Red Delicious apples, bananas, Iceberg lettuce, and dry beans fell by an average of 0.8-1.6 percent each year. Inflation-adjusted prices of cabbage, carrots, celery, cucumbers, and peppers fell by an average of 0.5-1.5 percent each year, over a slightly shorter period of time. These latter time series are somewhat shorter because BLS did not report prices for these foods for all years.

Rising price trends were observed for broccoli and field-grown tomatoes. These trends are not counter-examples, but reveal that the selection process

was not exclusive enough to screen out all foods that have undergone quality change. Unlike in 1980, today's consumer expenditures for broccoli are for partially or fully prepared products—washed and bagged florets and other cut products. Similarly, a technological improvement in the late 1980s changed the types of tomatoes grown and their sensory qualities.

The price trend evidence is specific to the foods examined. It neither indicates nor suggests that inflation-adjusted prices for all fresh fruits and vegetables are declining similarly. It does suggest that a wide class of unprepared fresh fruits and vegetables—those that have not been combined with labor-saving attributes and those that have long been available year-round—display declining prices along with prices of commonly consumed dessert and snack foods. The price trend evidence suggests that the price of a healthy diet has not changed relative to an unhealthy diet, although a healthy diet might not include every fresh fruit or vegetable currently available.

Many innovative fresh fruit and vegetable products have been introduced in recent years. These newer products account for a growing share of produce sold by retailers. The growing availability of such products suggests that many consumers value these innovations. A remaining question is whether low-income households also share in the benefits provided by foods that are more convenient and more readily available.

How Was the Study Conducted?

The study used BLS U.S. city average food price data, deflating the monthly time series price data (1980-2006) by the CPI to construct inflation-adjusted price trends for 4 dessert and snack foods and 11 fresh fruits and vegetables. Identifying fresh fruits and vegetables that were largely the same product in 1980 and 2006 was accomplished by selecting foods with long, mostly uninterrupted, time series retail price data. Excluded from the study were foods with seasonal periods each year with no reported prices. The fresh fruits and vegetables included Iceberg lettuce, whole carrots, cabbage, celery, Red Delicious apples, bananas, dry beans, cucumbers, peppers, broccoli, and tomatoes. The desserts and snack foods included chocolate chip cookies, cola, ice cream, and potato chips.