

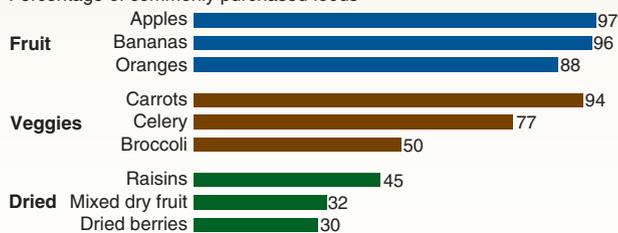
## Free Fruit and Vegetable Snacks a Big Hit in Schools

Free fruit and vegetable snacks were provided to over 64,000 children in elementary and secondary schools as part of USDA's Fruit and Vegetable Pilot Program (FVPP). In an effort to promote fresh fruit and vegetable consumption among school children and encourage healthy dietary choices, 107 elementary and secondary schools in 5 States (Indiana, Iowa, Michigan, New Mexico, and Ohio) participated in the FVPP for the 2002-03 school year. Students in participating schools were from diverse ethnic backgrounds and family income levels. The program was popular among most students, parents, school teachers, principals, pilot managers, foodservice staff, and representatives of State child nutrition programs. School staff and students recognized health benefits from the pilot program such as increased consumption of fruits and vegetables, reduced consumption of less healthy food, fewer unhealthy snacks brought from home, and lessened risk of obesity.

An evaluation of the pilot program by ERS found that the program's flexibility was key to its success. Schools were allowed to choose when, where, and how to implement the program as well as

### Apples, bananas, carrots, and raisins are on most schools' shopping lists

Percentage of commonly purchased foods



Source: Monthly administrative reports by pilot schools (Nov. and Dec. 2002).



Ken Hammond, USDA

the mix and quantities of foods offered. Initial concerns, such as difficulties with implementation, disruptions of classes, and possible messiness of the foods, were largely addressed. For example, teachers coordinated classroom activities with snack times. Some elementary schools changed food delivery from hallways to the classroom to better monitor behavior. The offerings were also modified to suit student tastes, to conform to different delivery methods (for example, whole fruits in free vending machines), and to accommodate daily preparation time. To address time and labor concerns, some schools offered more prepackaged items, such as bagged baby carrots.

Although the pilot program had ample funding, many schools cited the requirement to use no more than 10 percent of their grant money for nonfood costs (for example, administrative costs, such as extra labor) as too restrictive. This cost ceiling was implemented to ensure that the bulk of the money would be spent on fruits and vegetables and could be adjusted if the program were to continue. Nationwide expansion of the pilot program would cost an estimated \$4.5 billion, based on an average annual cost of \$94 per student and a count of 48.2 million children in public schools in 2001. Costs would be higher if private schools also participated. Based on the popularity of the pilot program, it may be expanded to other States. 

Jean C. Buzby, [jbuzby@ers.usda.gov](mailto:jbuzby@ers.usda.gov)

Joanne F. Guthrie, [jguthrie@ers.usda.gov](mailto:jguthrie@ers.usda.gov)

### This finding is drawn from ...

*Evaluation of the USDA Fruit and Vegetable Pilot Program: Report to Congress*, by Jean Buzby, Joanne Guthrie, and Linda Kantor, E-FAN-03-006, May 2003, available at:

[www.ers.usda.gov/publications/efan03006/](http://www.ers.usda.gov/publications/efan03006/)

## Productivity Growth Lags in Food Manufacturing

Productivity in U.S. food manufacturing has been growing slower than productivity in U.S. manufacturing overall. Between 1975 and 1997, productivity growth for U.S. food manufacturers averaged 0.19 percent a year, versus 1.25 percent for all U.S. manufacturers. Labor's not to blame: output per labor hour in food manufacturing increased steadily over the 22-year period.

Food manufacturing industries ranged in annual productivity growth from -0.42 percent to 1.12 percent. In general, less processed food industries like meatpacking and fluid milk evidenced little productivity growth. These industries use relatively expensive raw materials to make highly standardized products. On the other hand, the beverage

and bakery industries—which rely more on labor, elaborate packaging, and sophisticated extrusion technologies—had productivity gains of around 1 percent each year.

Productivity is the rate of growth in output net of growth due to increases in inputs—materials, labor, capital (machinery and buildings), and energy. Food manufacturing is materials intensive, with raw and semiprocessed agricultural products and packaging materials constituting 60 percent or more of the value of output. Productivity measurements capture the effects of applying more efficient techniques, technologies, or equipment to the manufacturing process, such as a labor-saving technology that allows a food company to make more corn chips per shift with fewer employees. Often, increases in productivity result from investments in research and development (R&D) into new production methods that lead to efficiencies like the example above.