Deficiencies exist in Americans’ diets. These dietary deficiencies may contribute to several types of chronic diseases, which in turn may impose large economic costs on individuals and society. Dietary deficiencies are worse among low-income Americans. Many intervention strategies, however, are under consideration by government and health advocates to improve Americans’ diets.

What Is the Issue?

One strategy to encourage low-income Americans to eat more nutritious diets is for the Government to subsidize the consumption of healthful foods, such as fruits and vegetables, or tax the consumption of less healthful foods, such as salty snacks. This report estimates recent consumption levels of fruits and vegetables, the effects of a price subsidy for low-income households on their consumption, and the associated cost.

What Did the Study Find?

American diets continued to fall short of the recommended consumption levels of fruits and vegetables. On average, Americans consumed 1.03 cups of fruits and 1.58 cups of vegetables per day in 2004, compared with the recommended 1.80 cups of fruits and 2.60 cups of vegetables. Individuals eligible for benefits through the Supplemental Nutrition Assistance Program (low-income consumers) ate even smaller amounts of fruits and vegetables—0.96 cup of fruits and 1.43 cups of vegetables.

Using a range of price elasticities and estimates of food consumption by low-income Americans, USDA’s Economic Research Service calculated that a 10-percent price discount at the retail level would encourage low-income households to increase their consumption of fruits by 2.1 to 5.2 percent (from 0.96 cup to 0.98-1.01 cups) and vegetables by 2.1 to 4.9 percent (from 1.43 cups to 1.46-1.50 cups).

In 2004, low-income households spent $3.91 billion on fruits and $3.71 billion on vegetables at retail outlets. Discounting the prices of fruits and vegetables by 10 percent for low-income households would cost the Government, on average, about $308 million per year for fruits (7.9 percent of recent expenditures on fruits by low-income Americans) and $274 million for vegetables (7.4 percent of recent expenditures on vegetables by low-income Americans).
How Was the Study Conducted?

A statistical model was estimated and empirical literature reviewed to obtain a range of demand elasticities for fruits and vegetables. The statistical model used 2004 Nielsen Homescan data to estimate consumers’ responses to price changes for fruits and vegetables by income groups. The literature review focused mainly on recently published journal articles and reports that documented demand elasticities. The 1999-2002 National Health and Nutrition Examination Survey (NHANES) data allowed for comparison of food consumption against the 2005 Federal dietary recommendations and estimates of food consumed at home and away from home. USDA’s MyPyramid Equivalent Database was used to convert food consumption reported in NHANES to the unit and food groups specified in the 2005 Dietary Guidelines for Americans. Data from the 2004 Bureau of Labor Statistics Consumer Expenditure Diary Survey (issued in 2006) were used to estimate food spending by households of different income levels. The cost of the price subsidy was derived using estimates of food spending and demand elasticities. Administrative costs were not considered.