

## EXECUTIVE SUMMARY

During School Year 2001/02, the National Dairy Council and the American School Food Service Association sponsored a pilot study to test the effect of measures taken to improve the attractiveness of fluid milk products offered to students in elementary and secondary schools. The School Milk Pilot Test (SMPT) was conducted in 146 schools (99 "test" schools; 47 "control" schools) representing 18 school districts in different parts of the United States. The purpose of this report is to apply the findings of the pilot study in estimating the impact of implementing these measures nationwide.

More specifically, the objectives of this report are to estimate the impact of national implementation on:

- the volume of milk marketed in elementary and secondary schools,
- student participation in school meals programs,
- the number of children benefited by the improved nutrient content of their diets,
- the incidence of major diet-related illnesses as a result of changes in the dietary intake of students,
- changes in health care costs resulting from the reduced incidence of diet-related illnesses,
- Federal child nutrition program costs, and
- the cost of packaging and distributing the new products.

In addressing these objectives, we have drawn on the results of numerous other studies to aid in interpreting the SMPT findings. In doing so, we have sought the most current, most authoritative sources we could find. Sources are identified in the list of references that appears at the end of the report. The several key assumptions that have been required are indicated and their implications noted where they occur in the report. In estimating the relationship between diet and health and the implications of dietary intervention for health care costs, we have been especially dependent on the expanding yet incomplete state of medical and nutrition knowledge.

The major findings of the analysis are as follows:

### **Impact on Volume of Milk Marketed**

If implemented nationally, milk sales are estimated to increase by around 15% in elementary schools and by around 22% in secondary schools. In total, this would result in an additional 63 million gallons of milk marketed annually through schools.

### **Participation in the School Meals Program**

Under national implementation, overall participation in the school meals programs is estimated to increase by about 430,000. Another 2.1 million students who are already participating in the programs but not taking milk as part of their meals would become milk drinkers.

### **Reductions in the Incidence of Diet-related Illnesses**

By adopting and maintaining healthy diets, the 2.6 million students most directly impacted by the changes would be expected during their lifetimes to reduce the risk of six major health conditions – coronary heart disease, type II diabetes, colorectal cancer, osteoporosis, stroke, and hypertension – by 20% to 50%, depending on the condition.

### **Reductions in Health Care Costs Associated with Diet-Related Illnesses**

In adopting healthy diets and lowering the risk of illness as they grow older, these students would lower the direct and indirect costs associated with these conditions by an estimated \$0.8 billion to \$1.1 billion (present value) per year.

### **Federal Outlays for School Meal Reimbursement**

Associated with increased participation in the NSLP and the SBP would be increased Federal reimbursements and commodity entitlements of about \$104 million per year.

### **Processing, Packaging, and Distribution Costs**

Changes in packaging, labeling, and distribution of the upgraded products would add an estimated 2.2¢ to 4.2¢ per unit to the cost of production. Nationally, this would add \$161 to \$308 million to the cost of producing these products each year. The cooling equipment used in the schools would require investments totaling approximately \$276 million. Depreciated over a useful life of 7 years, this would add an additional \$39 million per year to cost.