

Food and Agricultural Commodity Consumption in the United States: Looking Ahead to 2020

Biing-Hwan Lin, Jayachandran N. Variyam,
Jane Allshouse, and John Cromartie

Introduction

Thanks to an efficient agricultural production system and a free trade policy, the U.S. food supply is both bountiful and full of variety. A continuous influx of immigrants provides U.S. consumers with constant exposure to new, more exotic foods and preparation methods. Dining out, once thought to be a luxury, is now a necessity for many. Constantly changing economic, social, and demographic conditions have created an insatiable appetite for new food products, new packaging, more convenience, new delivery systems, and safer and more nutritious foods.

How do changing food preferences and diets affect future consumption and spending on food? Under consumer-driven agriculture projects conducted by USDA's Economic Research Service (ERS), separate econometric modeling efforts were undertaken to project food consumption and food expenditures under changing economic, social, and demographic conditions. Some of the consumption projections were reported in the Spring 2002 issue of *FoodReview* (Blisard et al.). Two reports have been prepared to document the method and data as well as to provide a comprehensive set of the projection results and their interpretations.

This report examines food consumption using data from the USDA food consumption surveys. ERS has projected changes in the U.S. economic, social, and demographic conditions, and these projections are used to forecast food consumption. As revealed by the 2000 Census, the average age of the U.S. population has been increasing, as has the population's racial and ethnic diversity. In this study, we pay attention to the

effects of the emerging changes in the U.S. demographic landscape on food consumption.

This study makes several contributions to the literature on food consumption. To our knowledge, this study represents the first attempt to model the effects of both eating out and diet-health knowledge on food consumption. The at-home and away-from-home separation of food consumption has never been attempted in the literature. We developed a first-ever food-commodity translation database to convert food consumption to commodity consumption. There are more than 7,000 food items and several hundred commodities included in the translation database. This database was made possible by the combined efforts of ERS and USDA's Agricultural Research Service (ARS). The end product of this research is a projection of commodity consumption, at home and away from home, over the next two decades.

This report begins with a discussion of the survey data used in estimating food consumption, as well as the databases from ERS and ARS that were used to develop the food-commodity translation database. The structure and specification of the econometric models are then described, followed by a discussion of the estimates. The reasoning behind the projected economic, social, and demographic conditions is presented, followed by our projections of food and commodity consumption, both at home and away from home. The contributions to the growth in consumption from economic, social, and demographic factors are also decomposed. The report concludes with a discussion of the sensitivity analysis that was conducted to examine the effects on at-home and away-from-home commodity consumption under the assumption that some adults maintain their eating-out habits as they age.