ARS National Program for Human Nutrition Monitoring
The ARS human nutrition monitoring program helps watch over the healthfulness of the country’s food supply and diet. This includes determining the food consumption and dietary patterns of Americans as a whole and for a variety of subgroups based on characteristics such as age, gender, ethnicity, and income.

Unique national resources that contribute to the success of the ARS human nutrition monitoring program include the National Nutrient Database for Standard Reference and the national “What We Eat in America” survey, which is the dietary intake survey component of the broader National Health and Nutrition Examination Survey, commonly referred to as “NHANES.”

Data on national dietary habits from this program serve as the foundation for many epidemiological (population) studies of diet and health. The information developed by the ARS human nutrition monitoring program provides invaluable information to policymakers, farmers, food processors, and manufacturers, as well as researchers.

Nutrition monitoring data identifies relationships between foods, nutrients, and disease occurrence. But such epidemiological information reveals only correlation—not proof of cause and effect. So when a trend is highlighted by nutrition monitoring data, the next step is to set up hypothesis-driven research to examine possible mechanisms that could be provoking the problem.

The nutrition monitoring data provides the foundation for many of ARS’s nutrition research projects. New research questions are posed from the data to solve nutrition-related problems.

Laboratory research generates high-impact science that can change paradigms in nutrition management. ARS provides not only the state-of-the-art equipment and facilities for human nutrition research, but also the ability to carry out multidisciplinary long-term research crucial to understanding and improving the American diet from conception through old age.

The centerpiece of the nutrition monitoring program is “What We Eat in America,” the only nationally representative dietary survey. ARS is responsible for the survey in partnership with the Department of Health and Human Service’s National Center for Health Statistics.

The other part of the nutrition monitoring program is defining the nutrient content of foods. This is a challenging task because of a rapidly changing U.S. food supply, evolving consumer food choices, and growing demand for data on newly discovered, potentially health-promoting food components. ARS is the keeper of the food-composition databases, not only developing new data and new analysis techniques, but ensuring wide access to all of the data.

Partnerships are critical to accomplishing this work. ARS and the Department of Health and Human Services are partnering on the National Food and Nutrient Analysis Program to enable nutrient analyses of foods that are major contributors of health-promoting food components in the U.S. food supply. The Dietary Supplement Ingredient Database has also been created through this partnership.

Cutting-edge research on what we eat as a population and what nutrients are in those foods is critical for ensuring that people have the opportunity to plan diets that support optimal health.