

ARS Research Program in Support of the Dietary Guidelines

ARS provides a large share of the research data on which the *Dietary Guidelines for Americans* and the Dietary Reference Intakes (DRIs) are regularly updated. Regardless of how much we know at any one moment, as scientific techniques become more precise and our understanding increases, there is always new research to consider and new insights to incorporate. In turn, new knowledge raises more questions and points to new areas where research is needed.

This is why the *Dietary Guidelines* are evolving targets rather than engraved in stone for all time.

Every 5 years, nutrition experts from outside the federal government are selected to serve on the Dietary Guidelines Advisory Committee, which reviews the scientific literature to set new dietary guidelines that reflect the current state of knowledge. The committee independently makes recommendations to the

Departments of Agriculture and of Health and Human Services about guidelines changes. The most recent committee, in 2005, also identified research gaps.

About a year ago, the Federal Dietary Reference Intakes Steering Committee tasked the Institute of Medicine (National Academy of Sciences) to review research gaps identified in the recently published reports on nutrient requirements. In 2007, the Institute of Medicine issued a report that synthesized research needed to advance the field of nutrient requirements.

The recommendations in those reports, together with other sources of information, including input from stakeholders and customers of ARS's research, provide a foundation for decisions about what research ARS needs to carry out during the next 5-year research cycle of the agency's human nutrition national program (NP #107, described on the World Wide Web at www.nps.ars.usda.gov).

That program cycle begins in 2009, and the national program leaders spent much of 2007 drawing together information on

research needs and coming up with priorities. Along with the recommendations from the DRI and Dietary Guidelines committees, input was sought from stakeholder groups that use ARS research, such as nonprofit agencies like the American Dietetic Association and the American Heart Association, as well as other government agencies, academia, healthcare professionals, commodity groups, the food industry, and consumers.

In addition to focusing on specific scientific information needs, the program takes into account research needed to address emerging issues, such as the country's burgeoning obesity problem.

ARS does food-based research to understand the nutrition people need. As research has gotten more sophisticated, this work has to deal with more and more factors, such as bioavailability of nutrients, newly identified health-promoting factors in foods, and information about the needs of different groups of people based on factors such as age, gender, ethnicity, and lifestyle.

ARS also conducts food-composition research to understand what particular foods can provide and performs the national survey of what people eat. This information has an important impact on *Dietary Guidelines* updates because the guidelines need to take into account not only what is considered optimum, but also what is feasible. Recommendations on amounts of fruits and vegetables to be consumed need to fit with what people can and will eat as well as with what nutrients they need.

ARS often devises teams of scientists to tackle a specific problem from many directions at once, bringing together experts in nutrition, genomics, physiology, behavior, and other areas to devise and conduct the research. Such an interdisciplinary approach reflects the array of tools scientists have today and the complexity of determining what people need to eat for optimum health. ★

■ = STATES WHERE ARS DOES RESEARCH SUPPORTING DIETARY GUIDELINES

