STRENGTHENING
OUR NATION’S FOOD
ASSISTANCE
PROGRAMS

RIDGE Program
Research Innovation and
Development Grants in Economics
One of the fundamental and enduring responsibilities of government is promoting the development of a healthy citizenry. It is a task that spans the generations as infants grow to adults and as our national body—a mix of ages, genders and economic and ethnic groups—continues to change.

To help meet the food needs of our nation's most vulnerable groups, the U.S. Department of Agriculture (USDA) maintains 15 food assistance programs including the Food Stamp Program, the National School Lunch Program and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). These programs enable people to make good food choices and improve their long-term health and workforce productivity.

Science-based studies provide valuable guidance to aid USDA in advancing these programs. The USDA's Economic Research Service (ERS) funds the Research Innovation and Development Grants in Economics (RIDGE) Program to provide research that informs program administrators, policymakers and analysts. This report highlights important and practical contributions made by researchers associated with the RIDGE Program through studies that have focused on:

- Providing access to healthy foods at affordable prices
- Improving nutrition to build a healthy workforce
- Responding to diverse needs

RIDGE Expands Innovative Research

The RIDGE Program broadens and strengthens the network of university-based researchers who collaborate in tackling the unique food and nutrition challenges existing across communities, regions and states. Building expertise across the United States is a vital part of ensuring that food assistance policies and programs meet the needs of families and communities across a variety of special circumstances. RIDGE researchers are drawn from an array of disciplines and include economists, sociologists, nutritionists, anthropologists and public health professionals.
RIDGE stimulates innovative research on food assistance and nutrition issues through one-year grants with investments in the range of $20,000 to $40,000. The program (formerly known as the ERS Small Grants Program) is administered by ERS in partnership with five academic research institutions across the country (see chart on page 7).

These five institutions oversee the application, peer review and grant award processes. Each institution studies a different aspect of food assistance or nutrition, or subgroups of program recipients.

While the financial investments associated with the RIDGE Program are modest, the products generated from these resources are vital in expanding the body of knowledge needed to solve issues in the food assistance and nutrition support system. These research findings often are published in food and nutrition and social sciences journals. Other reports are disseminated on the Internet through the five cooperating organizations.

**Access to Healthy Food at Affordable Prices**

Good nutrition is the bedrock of health and the foundation for physical and mental well-being. However, the availability of affordable healthy food may be limited to some consumers by factors such as low income; the kinds of food provided by or approved for purchase under government commodity programs; the lack of access to large-scale, local grocery stores that stock a diverse choice of foods; the inability to access distant supermarkets because of a lack of automobiles or inadequate public transportation; and a reliance on limited-selection neighborhood stores that charge higher prices for the goods they carry.

- **Residents of rural, high-poverty counties have reduced access to healthy foods**

RIDGE-supported researchers found that a substantial number of residents of counties in the rural South have limited access to stores that carry a wide variety of food – a condition they labeled "food deserts." They discovered that in nearly one-third of the nonmetro counties in the South, more than 50 percent of the population must drive over 10 miles to reach a supermarket, supercenter or wholesale club. The researchers asked whether the absence of large retailers meant that smaller fruit and vegetable markets might be readily available to local residents. Surprisingly, they found that more than 95 percent of counties, most of which were in high-poverty areas, did not have fruit and vegetable markets that were easily accessible to their residents. As a result, residents were more likely to have to travel greater distances, incurring higher transportation costs, to purchase fresh fruits and vegetables.
The study also noted that given the limited public transportation available in most of these rural counties, residents have to depend on a private vehicle to reach distant food markets. However, Food Stamp Program participants may find it difficult to own a dependable automobile and not exceed the Food Stamp Program limit on assets. This creates a Catch-22 for rural food stamp recipients. If they own a car, they may not qualify for food stamps. If they do not own a car and receive food stamps, they may find that getting healthy foods locally could be a difficult challenge. The researchers point to the importance of local strategies to expand access to healthy foods for those living in low-income rural counties.

- **Access to nutritious foods is a problem on Indian reservations**

A phenomenon similar to the retail pattern in the South has been found on Navajo reservations in the Southwest where small convenience stores and trading posts are predominate. A survey of those stores found only a limited variety of healthy and nutritious foods available in these establishments.

A survey conducted for the Native Peoples Technical Assistance Office of the University of Arizona found few low-fat dairy products were available, fresh fruits and vegetables were in poor condition and the prices between stores varied widely. Often Navajos must rely on foods that are processed, lack adequate nutrients and are high in fats and salt. Researchers noted rapidly increasing rates of obesity and diabetes on the reservations.

Also noteworthy is that in their survey of stores and the types of foods available in these businesses, the researchers found that the greatest variety of healthy food was accessible in stores participating in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) where higher standards were required.

The lack of access to healthy food is not limited to the Navajo reservation. RIDGE researchers working with the University of Arizona’s American Indian Studies Program uncovered a similar challenge in their study of the Fort Peck Indian Reservation in Montana. They discovered that the nutrition-related illnesses being experienced by Native American residents were partly a result of the loss of their more health-oriented traditional diets.

**Improved Nutrition Builds a Healthy Workforce**

Research shows that childhood obesity increases chances of obesity in adulthood and accelerates the odds of heart disease and diabetes. Other studies indicate that poor nutrition hinders a child’s school performance. For these reasons, it is important to invest in national policies that start children on a path to achievement, support brain development, improve child health and reduce child obesity.
RIDGE research projects have studied two programs that directly affect children – the National School Lunch Program (NSLP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The findings provide evidence that children in the WIC program experience lower rates of obesity. Similarly, the research shows that children taking part in school lunch programs do not have higher rates of obesity than non-participants, allaying a concern that food served in school lunches enhanced children’s risk of becoming overweight.

• **Children in the WIC program reap important benefits**

WIC provides food and nutritional advice to low-income women who are eligible, and infants and children (up to age 5) who are nutritionally at risk. Children ages 1-4 represent the most rapidly growing WIC participant group.4

RIDGE researchers found that WIC participation at age 4 reduces the likelihood of the child being at risk of obesity. This is an important measure of the success of the WIC program, given the threat of obesity to public health and the need to establish healthy eating habits early in life.

**Studies indicate that poor nutrition hinders a child’s school performance.**

The study also found that Medicaid policies affecting WIC participation among infants had long-term effects on participation in the WIC program. By contrast, increases in the generosity of Medicaid towards older children increased WIC eligibility, but had little impact on participation.

• **Good nutrition may contribute to better school performance**

Children entering school who are too old for the WIC program may become eligible for school feeding programs such as the National School Lunch Program (NSLP). The lunch program aims to provide nutritious foods to all school-aged children either at full price or, for low-income students, for free or at reduced cost. The NSLP is available in over 100,000 public and non-profit private schools and residential child care institutions and provides lunches to more than 30 million children each school day.
Research has shown that the school lunch program helps to improve the diets of participants and contributes to good health. A recent RIDGE study went a step further and examined whether the program improves behavior and academic outcomes. RIDGE researchers undertook this challenge by examining the effects of participation in the NSLP on changes in children’s behavior, test scores, and body weight, and whether these effects differ by gender.

The RIDGE study found little evidence that participation in the NSLP contributed to excessive increases in children’s body weight. However, the researchers did find that boys enrolled in the NSLP improved their reading test scores between kindergarten and first grade. This association did not vary among children who were economically disadvantaged and received free or reduced-price lunches or those who paid full price.

By addressing an important gap in the research on the impacts of the NSLP on academic achievement, the RIDGE researchers helped uncover another valuable dimension of the school lunch program.

Responding to Diverse Needs

Our nation is diverse and continually changing in character. RIDGE-supported research assists policymakers in developing practical, workable options that can succeed in meeting the unique health and nutritional needs of a diverse population across a variety of circumstances.

- Targeted subsidies promote fruit and vegetable consumption

RIDGE researchers found that providing coupons to buy fresh fruits and vegetables increased purchases of these items in a sample of predominantly Latino WIC participants in Los Angeles. The researchers determined that participating WIC mothers chose a wide variety of fruits and vegetables and redeemed nearly all of their coupons. In addition, the increases in fruit and vegetable consumption launched as part of the research program continued...
after the food assistance subsidies were no longer provided. This suggests that targeted subsidies can increase fruit and vegetable consumption to help create a healthier diet. These findings were helpful to policymakers revising the WIC food packages.

According to Suzanne Murphy, chair of the Institute of Medicine’s Review of the WIC Food Packages Committee, “The study provided important information and in its report, the Committee recommended that the WIC packages include a cash-value voucher that participants could use to purchase fresh fruits and vegetables. The study provided evidence that such a voucher is likely to result in the selection of a variety of nutritious fruits and vegetables.”

- **Food assistance helps newcomers establish healthy food patterns**

Food assistance programs serve to move newcomers into the American system of work and community life, and to ensure they will be productive and participatory. RIDGE researchers learned that refugees who used food assistance had higher employment levels than similar native economic groups and moved off assistance programs more quickly.

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**RIDGE Partners**

The following five university-based organizations are key partners with the Economic Research Service/USDA in managing the RIDGE Program across the United States:

- **Southern Rural Development Center, Mississippi State University**, focuses on food assistance needs of vulnerable people, families and communities in the rural South. The Center also has established a Rural South Food Assistance Research Task Force that has provided ongoing guidance in shaping the priority focus areas of the Center’s annual RIDGE research grants program. [http://srdc.msstate.edu/](http://srdc.msstate.edu/)

- **The American Indian Studies Program, University of Arizona**, is working with scholars at tribal colleges and other institutions to support research on the unique issues and problems of Native Americans with respect to food assistance. Their program focuses on food assistance programs and Native Americans, primarily those living on reservations. [http://aisp.web.arizona.edu/](http://aisp.web.arizona.edu/)

- **Institute for Research on Poverty, University of Wisconsin**, focuses its research on the effects of food assistance on individual and family well-being and food security. [http://www.irp.wisc.edu/](http://www.irp.wisc.edu/)

- **The Harris School of Public Policy, University of Chicago**, explores interactions between food assistance and other welfare programs and linkages between the macro economy and food assistance. [http://harrisschool.uchicago.edu/](http://harrisschool.uchicago.edu/)

- **Department of Nutrition, University of California, Davis**, conducts research on the impact of food assistance on nutritional risk indicators (anthropometric, biochemical, clinical and dietary), food purchasing practices and food insecurity. This program encourages examinations of multiple indicators of nutrition impact and interdisciplinary approaches that integrate epidemiology, economics or anthropology with nutrition. [http://nutrition.ucdavis.edu/](http://nutrition.ucdavis.edu/)
Still, it takes time for refugees to adjust to the United States. Food and budget management education targeted to these newcomers is a big help. RIDGE researchers found that Food Stamp Program managers who sought to accelerate the transition of newly arrived families off food assistance programs within six months were being unrealistic. Food assistance researchers discovered that the adjustment period for new immigrants is typically two to three years.

Helping newcomers navigate the food system provides a great value for our society as a whole. Researchers found that introducing new arrivals to food and nutrition education programs improved their selection of healthy food choices. This helps ensure that they become healthy contributors to American life.

Reforms to state and national welfare systems in the mid-1990s led to a concurrent drop in participation in food assistance programs among recent immigrants. Policymakers were concerned that changes in the welfare system were contributing factors to this decline. A RIDGE project was funded to conduct an in-depth examination of this issue. Research revealed that differences in socioeconomic characteristics between immigrant and native households, particularly their levels of education, were the principal factors responsible for much of the gap in participation rates between the two groups. Findings also showed declines in immigrant food stamp participation, unexplained by socioeconomic characteristics, which began prior to the introduction of major reforms to the welfare system. The timing of these initial declines was suggested as evidence that forces besides welfare reform could be responsible for continuing declines in immigrant food stamp participation.
The Bottom Line: RIDGE Researchers Help Guide and Provide Sound Choices

Policymakers need sound, reliable information to make critical policy decisions related to food assistance programs, particularly as they relate to the diverse local needs of their constituents. The university-based researchers supported through the RIDGE Program provide valuable insights on the various components of our nation’s food assistance programs. While only a handful of research projects are highlighted in this report, many valuable projects have been completed. These projects are showcased on the Web sites of the five RIDGE partners.

Taken as a whole, the RIDGE Program is paying off in multiple ways. Briefly stated, the program is providing federal and state policymakers, agency leaders and the research community with:

- Critical information to evaluate food assistance-related programs.
- A science-based view of effects associated with changes in food assistance policies.
- A cost-effective approach for uncovering food assistance-related challenges that warrant more in-depth analysis and expanded investments.
- A growing network of well-trained food policy researchers from across the country with diverse backgrounds whose collaborative activities are building new knowledge for tackling the complex food and nutrition challenges facing the nation.
- A timely set of studies being generated that are helping policymakers and agency leaders design food assistance programs to more effectively tailor their programs to meet the diverse needs and challenges of our nation’s low-wealth people, families and communities.
Since its inception in 1998, the RIDGE Program has invested in 272 researchers and graduate students located in 86 higher education institutions across the nation. It has helped build a strong network of social scientists and institutions engaged in innovative research on key food assistance and nutrition-related issues.

Building the Research Capacity of Minority-Serving Colleges and Universities

Strengthening the research capacity of faculty and students located at minority-serving institutions — Historically Black Colleges and Universities and Native American Colleges — has been an important goal of the RIDGE Program. Over the past nine years, faculty and students located at 20 minority-serving institutions in the United States have been actively involved in RIDGE-supported research.
References

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4“Medicaid at Birth, WIC Take-Up, and Children’s Outcomes,” Marianne Bitler, RAND Corporation, and Janet Currie, UCLA. Grant awarded by the Institute for Research on Poverty, University of Wisconsin–Madison.


6“Are Economic Incentives Useful for Improving Dietary Quality Among WIC Participants and Their Families?,” Dena Herman, Gail G. Harrison and Abdelmonem A. Afifi, UCLA School of Public Health, and Eloise Jenks, Public Health Foundation Enterprises, WIC Program. Grant awarded by Department of Nutrition, University of California, Davis.

7“Household Food Security, Dietary Intake, and Obesity Among a Sample of Recently Arrived Liberian Refugees Receiving Food Assistance,” Craig Hadley, Brown University. Grant awarded by the Department of Nutrition, University of California, Davis.

8“Immigration and the Food Stamp Program,” George J. Borjas, Harvard University. Grant awarded by The Joint Center for Poverty Research, University of Chicago and Northwestern University (now the Harris School of Public Policy at the University of Chicago).