APPENDIX A
White Paper of the Lower Rio Grande Valley Nutrition Intervention Research Initiative

The population of the Lower Rio Grande Valley, which is largely Hispanic, is characterized by high rates of poverty and a high prevalence of nutrition-related chronic diseases. These include diabetes, obesity, cardiovascular disease, infectious diseases, and cancer. Major factors related to the prevention and treatment of these diseases are eating habits, diet, and nutritional status, all of which are largely determined by socioeconomic factors, age, culture, and education. How these factors affect health status and how they prevent diseases are complex issues, but they are well within the domain of the U.S. Department of Agriculture (USDA) Agricultural Research Service, as is undertaking community nutrition interventions for wellness and disease prevention.

To improve the nutritional status of the Hispanic population, which is the fastest growing ethnic group in the United States, in the Lower Rio Grande Valley, a consortium of government agencies and universities is proposing a multisite, multiyear research initiative in community-based nutrition research. Members include the USDA Agricultural Research Service; The University of Texas–Pan American at Edinburg; The University of Texas at Brownsville and Texas Southmost College; Texas A&M University–Kingsville; The University of Texas Health Science Center at Houston School of Public Health and its Brownsville Regional Campus; Texas A&M University System Health Science Center School of Rural Public Health South Texas Center at McAllen; the USDA Children's Nutrition Research Center, Baylor College of Medicine, at Houston; Texas Cooperative Extension at College Station; and the Texas Agricultural Experiment Station at Weslaco. Each partner brings unique expertise from ongoing programs and nutrition research, and each brings a commitment to collaborate to accomplish the following mission: *to improve the nutritional health of the population of the Lower Rio Grande Valley through effective nutrition awareness, education, intervention, and research at the family and community level.*

In multidisciplinary collaborative studies, investigators will study lifestyle behaviors; psychological factors; and cultural, economic, agricultural, and environmental issues related to families and communities. Comprehensive initiatives will emphasize identifying links among food, nutrition, and health through basic and community-based research. Research outcomes will provide the basis for successful interventions that are cost-effective and that have an impact on regional and national food and nutrition policy while improving population health in the valley. The consortium will serve as a clearinghouse for food, nutrition, and agricultural information; for published and prospectively collected data; and for research specific to the population of the valley. The initiative will establish an educational resource and integrate basic and community-based research into the curriculum and training of health professionals, students, and researchers throughout the United States, especially that regarding nutritional behavior in the family and community context.

Other outcomes of this research will be in the economic, sociological, and public policy areas. For example, it may encompass costs of nutrition-related diseases specific to the region; longitudinal studies of the population to determine cause-effect relations and trends; improved health of the population; and identification of nutrition interventions that have an impact on national policy in

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The Lower Rio Grande Valley Nutrition Intervention Research Initiative is guided by a consortium of academic and government institutions, whose faculty and staff representatives contributed to this volume, including Jenna Anding, Margaret L. Bogle, Esperanza R. Briones, R. Sue Day, Farzad Deyhim, Bahram Faraji, Isidore Flores, William J. McIntyre, Nelda Mier, Ann Millard, Charles A. Onstad, Gerson Peltz, John R. C. Robinson, Sharon Francey Robinson, and Maureen Sanderson. For their affiliations, please see the list of contributors following Appendix B. For a history of the consortium, see chapter 1. For the consortium's address, see the copyright page.

food and nutrition and reduce health care costs. The economic effects of such research include the potential for increased productivity, a healthy labor force, and decreased health care costs. An informed population, one of the benefits of such an endeavor, can help shape and change contemporary policy related to food and nutrition and affect subsequent generations.

This Lower Rio Grande Valley Nutrition Intervention Research Initiative (NIRI) will focus on four Texas counties: Cameron, Hidalgo, Starr, and Willacy. The USDA Agricultural Research Service will direct and coordinate the initiative. Other resources available to the consortium include ongoing nutritional research at The University of Texas–Pan American; The University of Texas at Brownsville and Texas Southmost College; the Texas Agricultural Experiment Station; and the USDA Agricultural Research Service Kika de la Garza Subtropical Agricultural Research Center. Playing central roles will be undergraduate and graduate students from the various universities, staff of Texas Cooperative Extension, faculty from The University of Texas School of Public Health in Houston and Brownsville, and experts from clinical laboratories at the Children's Nutrition Research Center, Baylor College of Medicine, and the Center for Young Children at Texas A&M University–Kingsville. The research will require multiyear, multisite collaboration. The consortium estimates that the cost of this initiative will be $6 million per year in addition to in-kind resources brought together by this effort.

The Lower Rio Grande Valley NIRI is unique in that it is the first national research program to select a primarily Mexican-American population having disproportionate rates of nutrition-related chronic diseases as a target for research in a specific region of the United States. This initiative will develop nutrition interventions, implement and monitor population changes over time, and determine the benefits of food, nutrition, and behavioral interventions to quality of life.