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RESEARCH SUMMARY

## GOVERNMENT DIETARY GUIDELINES Uncertain Science Leads to Questionable Public Health Policy

The United States Department of Agriculture (USDA) has issued general dietary recommendations for more than a century, and during that period the health, longevity, and nutritional status of Americans have improved markedly. The first version of *Dietary Guidelines for Americans* (DGA) was published in 1980, and the report has been jointly published every five years by the USDA and the Department of Health and Human Services.

In "Government Dietary Guidelines: Uncertain Science Leads to Questionable Public Health Policy," Edward Archer, Michael L. Marlow, and Richard A. Williams look at the federal government's dietary recommendations and suggest that the government needs to adjust its recommendations to accord with the latest scientific evidence. Currently, the guidelines in the DGA are based on implausible, biased surveys, while rigorous evidence and the diversity of expert opinions on diet– health relationships are ignored. Future government reports on dietary guidance and economic policies aimed at improving public health should use valid scientific data and analysis.

## EVOLUTION OF DIETARY GUIDANCE

The National Health and Nutrition Examination Survey is the government's primary source of data on the "American diet" and is used in dietary recommendations such as the DGA. Yet these data are fatally flawed because no human could survive on the diets reported in the survey. In fact, earlier research showed that a person with the lowest possible energy requirements could not survive on the number of calories reported by the average person in the survey. Therefore, any recommendations based on these data are likely unsound.

- Before 1977, USDA recommendations were simple, food-based advice that provided general information on choosing foods and beverages to overcome deficiencies and maintain health.
- After 1977, the recommendations increased in complexity and length and included nutrientspecific advice based on evidence accessible only to specialists. Instead of focusing on well-

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established science, government-funded researchers based these recommendations on weak, correlational evidence suggesting that avoiding specific foods may prevent chronic, noncommunicable diseases.

## UNCERTAIN SCIENCE OF US NATIONAL NUTRITION SURVEILLANCE

- All federal dietary guidance and nutrition policy is based on the USDA's nutrition surveillance programs, which use memory-based dietary data collection methods. These methods are considered "pseudoscientific and inadmissible" as scientific evidence.
- In these surveys, researchers simply designate numeric values to whatever the respondents are willing or able to recall about what they think (or want the researcher to think) they consumed during the study.
- USDA- and government-funded nutrition researchers routinely manipulate implausible dietary data to create the appearance of plausibility. Post hoc manipulations such as statistical and mathematical adjustments and the deletion of implausible data likely introduce biases that invalidate any conclusions drawn from the data.

## SCIENTIFIC BASIS FOR ECONOMIC INTERVENTIONS

- Public policies are simplistic and problematic. A lack of understanding that the human body is a complex, dynamic system has led to simplistic, ineffective interventions that redirect resources away from the actual causes of disease and ill-health. Many policy initiatives are based on the false, simplistic notion that a reduction in caloric intake will lead to a reduction in obesity and metabolic diseases.
- Guidelines are used to rationalize intervention. Policymakers frequently cite government dietary recommendations as their inspiration, but suggested interventions (e.g., taxes, food labeling requirements, and bans) are demonstrably ineffective and distract from potential solutions. They may even have negative unintended consequences.
- "Healthy vs. unhealthy" is a false dichotomy. Government dietary recommendations have perpetuated perceptions that foods can be classified as either healthy or unhealthy. Studies indicate that consumers may react to this false dichotomy in unintended ways. For instance, studies show that individuals who eat "healthy" foods tend to believe they have a license to indulge in "unhealthy" foods.
- Uncertain science produces uncertain outcomes. Economic interventions and other government policies have not achieved their goals because they reinforce the false dichotomy of "healthy vs. unhealthy" and are not based on rigorous scientific evidence. If government agencies continue to offer recommendations without sufficient scientific evidence, more aggressive economic interventions may lead to even greater harm to public health.