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## POTENTIAL IMPACTS OF 2010 DIETARY GUIDELINES FOR AMERICANS

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**W**ill the Dietary Guidelines for Americans (DGA) 2010 (USDA, FDA 2011a) be any more effective at changing food consumption patterns and reducing obesity than the previous guidelines? If so, what impacts would there be on the U.S. agriculture sector, on trade, and on food processing and retailing? Beyond the issuance of guidelines and related promotional/educational activities, what changes in policies have the propensity to make a difference? A series of four theme papers can only begin to scratch the surface in providing answers to these, often politically charged, questions. The papers can, however, provide insight into the complexity of the issues and the role that applied economists might play in dealing with issues related to the dietary guidelines. While leaving the economic content to the authors of the papers, my objective in the overview is to provide perspective on why these particular topics were selected, what central conclusions might be drawn from them, and their implications for research, teaching, and extension.

### DGA History

The history of the dietary guidelines is well documented in the literature. Davis and Saltos (1999) chronicle the history of guidelines that date back to 1894. Nestle's *Food Politics* (2007) adds an important political perspective to the development and implementation of the guidelines through the food pyramid era. The contemporary, science-based era of the guidelines began in 1968 with the deliberations of Senator McGovern's Senate Select Committee on Nutrition and Human Needs. These deliberations were science-based in that the committee staff utilized the expertise of nationally-recognized dietary and medical experts in crafting their recommendations. The issuance of its *Dietary Goals for the United States* in 1977, which recommended substantially reduced consumption of saturated fats, sugar, and salt, set off a firestorm of concerns among beef, pork, meat packers, milk, and caloric-sweetener interest groups. Utilizing the work of McGovern's Select Committee, USDA's Assistant Secretary for Food and Consumer Services, Carol Foreman, in 1979 had *Food: A Hassle Free Guide to a Better Diet* published. In many respects, the rest is history. Now required by law to be issued every five years, with each iteration, the DGAs become more objectively focused to solve diet and health-related problems, more science-based, and more prescriptive in terms of needed public- and private-sector action. While the guidelines issued subsequent to the work of McGovern's Select Committee and Carol Foreman have changed in detail, the basic nutrition and dietary message has not changed—eat right and exercise.

Carol Foreman (December 17, 1977) had the notion that consumers should first be educated to eat right; then government should provide the incentives to produce the recommended commodities. Some concluded that such government incentives would be overly invasive and reasoned that market forces could perform this production allocation function. However, they ignored the fact that government had already invaded agricultural production through a myriad of subsidy programs, which continue to the present.

Policymakers treated fruits and vegetables as an orphan sector. At times, fruits and vegetables were discriminated against overtly by denying subsidies to farmers who desired to use farm program flexibility provisions to produce fruits and vegetables. Arguably, fruit and vegetable producers asked that subsidized program farmers be denied the "right" to use program land to produce fruits and vegetables. But, in the process, consumers were denied access to U.S. produced products, to the benefit of foreign-produced products.

The organization of this set of articles reflects a desire that, to the extent possible, the profession's analyses and models consider the full scope of products consumed and produced by the agriculture sector. This DGA impacts theme begins with an interdisciplinary summary analysis of the obesity challenges faced by an increasing share of the population, written by Duffy, Yamazaki, and Zizza. This is followed by two articles that encompass the impacts of

the DGA 2010, initially on consumer decisions and then on production decisions. The first of these articles, by Palma and Jetter, recognizes that the DGA mission is to create balanced diets from a consumer perspective that cuts across all foods. The second of these articles, by Ribera, Yue, and Holcomb, recognizes that increases in the consumption of fruits, vegetables, and fish, with corresponding reductions in the consumption of red meat and butter, would have implications that cut across the entire agriculture sector. The final article by Thilmany and Low addresses the need to keep the food supply chain open to U.S. produced local foods, which are primarily fruits and vegetables.

### **DGA 2010 and the Obesity Epidemic**

Duffy, Yamazaki, and Zizza note that the DGA 2010 reflects greatly increased national concern about the rise in obesity that has occurred over the past two decades. Palma and Jetter note that, at first glance, the DGA 2010 guidelines may not appear to be a whole lot different in food group recommendations than the DGA 2005. The differences are in the detail within the food groups. Consistent with the obesogenic DGA 2010 theme, Palma and Jetter make the key point that there is a need to reduce caloric intake from the current average 2,600 calories. This translates to a need to substantially reduce consumption of foods containing large quantities of fats, oils, sugar, and high fructose corn sweeteners. In particular, this means less consumption of sweetened drinks—not just soft drinks, fried foods, and fatty meats, which are typical components of fast food. Nevertheless, the specific recommendations on these predominant food ingredients are difficult to follow.

Ribera, Yue, and Holcomb point out that substituting fish for beef, pork, and poultry for two meals per week has important implications for the livestock subsector, as does the DGA 2010 recommendation that meat consumed needs to be lean. The recommendations that beans are a substitute protein source and soymilk is a substitute for lowfat milk also have important implications for both animal and plant production agriculture. In addition, they emphasize the need to increase consumption of whole grains, while reducing consumption of enriched, refined grains. The DGA 2010 winners would be the fruit and vegetable subsectors. However, the Ribera, Yue, and Holcomb analysis indicated that a substantial share of this increased consumption could come from imports. In sum, these are significant changes which, *if they occur*, would have important implications for the agriculture sector.

### **Perspective on Behavioral Economics**

Palma and Jetter conclude that past guidelines do not appear to have had much impact on consumption patterns, which is borne out by trends in obesity as documented by Duffy, Yamazaki, and Zizza. Is there any hope that DGA 2010 will be different? Duffy, Yamazaki, and Zizza conclude that understanding dietary choices requires multidisciplinary behavioral analysis. This conclusion is an important message for economists and for policymakers, who see economic incentives embodied in various forms of fat taxes as a solution to obesity and dietary change. It may be that nutritionists operating in cooperation with medical professionals prescribing solutions to health problems would have greater impacts. Wansink (2010) points out that nutrition must be marketed to change behavior. People must “reengineer” themselves to think differently about foods, exercise, and weight.

### **Perspective on Changes in the Marketing System**

One of the reviewers suggested that the paper on local foods by Thilmany and Low does not fit with the DGA theme. It is a fact that local foods place a heavy emphasis on the fruits and vegetables historically recommended by the DGA. From a strategic perspective, agricultural, food processing, food service, and food marketing interest groups need to be very careful in designing strategies for dealing with the dietary guidelines. Continuing to ignore the science-based nature of the guidelines and the related lifestyle changes may be a mistake at a time when obesity and its adverse health consequences are a focal point of attention. During these times, there may be much greater opportunities to profitably market nutrition. The complexities of the behavioral issues are clearly indicated in the work by Wansink (2010), Kessler (2009), and Nestle (2007). While still a small share of sales, organic foods have been turned into a positive development by all components of the food supply chain. That is, much to the chagrin of smaller farmers, the organic market is becoming co-opted by commercial segments of the food value chain from farm-to-table. An implication of the Thilmany and Low paper is that local foods may represent a significant challenge to food retailers and food service operators that typically have placed more emphasis on imports than on accessing and marketing local foods.

### **Implications for the DGA 2010 Implementation**

The contemporary center of controversy regarding the DGA 2010 is not so much in their content as in how they are to be implemented. Disputes between school administrators and parents over the nutritional value of school lunch versus bag lunches could spill over into the SNAP, WIC, and related programs. Insights into the FDA and USDA strategies are contained in the questions and answers segment of the DGA 2010. They appear to be considerably

more aggressive than for previous DGA implementation strategies (USDA, FDA 2011b). They are discussed in the Palma and Jetter paper.

Research, historically, appears to have ignored the complexity of DGA issues relating to grains, fats and oils, and the livestock and dairy sectors. These complexities are but one signal indicating an expanded need for multidisciplinary research, teaching, and extension approaches to dealing with the food consumption, production, and marketing issues raised by the DGA 2010. Major behavioral changes in consumption patterns must take place to effectively deal with diet-health issues such as obesity. These changes have important multidisciplinary dimensions. In addition, applied economists have an important role in identifying policy options that can facilitate the structural and behavioral changes needed to address the evolving USDA and FDA issues.

### **For More Information**

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