

Changing Structure of Global Food Consumption and Trade: An Introduction

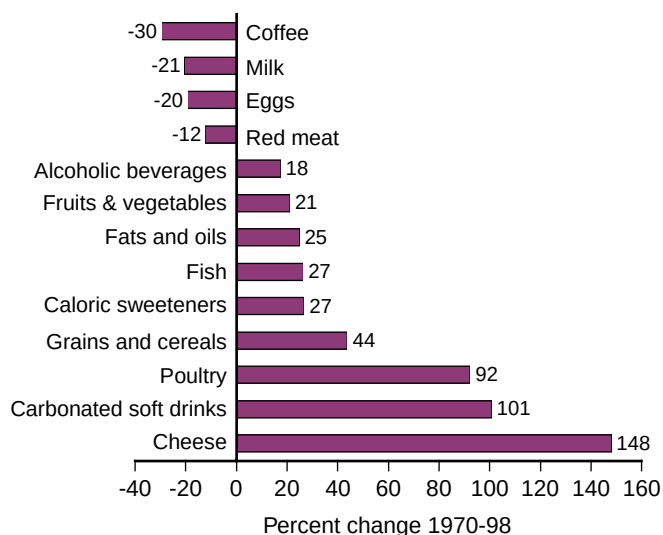
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Introduction

Global food consumption patterns have changed over time. Our diets on a daily basis are very different from what our parents or grandparents consumed. In winter, instead of living on canned fruits and vegetables, we can now purchase at our neighborhood grocery store fresh grapes from Chile, oranges from Australia, snow peas from Guatemala, and just about any produce all year long. Similarly, the time spent on food preparation has changed dramatically; we can buy pre-cut vegetables, frozen dinners, and sometimes order different ethnic carry-out meals on almost a daily basis. These changes in food consumption patterns have resulted in large changes over time in per capita food consumption in the United States (fig. 1). Per capita consumption of coffee, milk, eggs, and red meat has declined significantly during the past 30 years, while the consumption of cheese, soft drinks, and poultry have increased. Food consumption in the United States can no longer be categorized by food eaten by a few major ethnic groups. It ranges from fast-food burgers and fries to home-cooked meat and potatoes, tacos and fajitas, Chinese noodles and rice, pasta and pizza, Middle Eastern pita sandwiches, and many other types of food. These changes in the American diet have occurred gradually over time, resulting in part from increased ethnic diversity in the population, greater disposable household income, increased trade and improved transportation, greater numbers of women in the labor force, and increased awareness and consumer preference for improved quality and more healthful products.

Just as the American diet is constantly changing, globalization and increased per capita income is changing the eating habits of individuals all around the world. What are the forces driving these changes in global food consumption? How do these forces differ across developed and developing countries? How does this affect global food trade? In the following 10 chapters, this publication attempts to answer the above questions. Trade is one of the important factors that increase the array and the availability of food to consumers. Trade, in turn, is affected by supply side factors such as relative growth in factors of production, and demand-driven factors like growth in disposable income and changing consumer preferences. The first chapter in this publication discusses how these and other factors, including improved transportation, have

Figure 1
Changes in U.S. per capita consumption, 1970-98



Source: Economic Research Service, USDA.

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changed the composition of global food trade. Our discussion of the topic is not exhaustive. For example, the effect of trade liberalization and political changes that have occurred in many countries around the world, which in turn may have affected food availability, is not addressed in this publication.

One of the primary factors affecting food consumption patterns, is of course, the ability to purchase food. The last two decades have witnessed major increases in per capita income levels of households all over the world. The first two chapters of this publication analyze the impact of income changes across countries. Chapter 2 specifically analyzes how income and food price changes affect consumer behavior in low-, middle-, and high-income countries. As illustrated in figure 2, consumers in high-income countries such as the United States spend a large share of their food budget on meat, while cereal is the predominant component of the food budget for consumers in poorer countries such as Kenya and the Philippines. Generally, as the population grows wealthier, the consumption of meat and fresh produce increases². At very high-income levels, such as in the United States, changes in income and food prices may not translate to perceptible changes in food expenditure patterns at a national level. However, changes may occur within the composition of sub-categories of food, such as substituting grocery store brands with 'quality-assured' organic brands, or replacing store brand meat and cheese with imported products perceived to be of better quality. Additionally, as illustrated in figure 1, the composition of U.S. meat consumption changed significantly during the last two decades, with increases in poultry replacing declining red meat consumption. Similarly, at very low-income levels, changes in income and food price may not result in changes in consumption of certain food groups. This is due to consumption shifts within a food sub-category. For example, when the price of rice increases, individuals may consume more wheat or coarse grains, and not change their overall expenditure on cereals. As income levels increase beyond a certain threshold and consumers migrate to the 'middle-income' category, they appear most likely to change their food basket by consuming a more diverse and higher valued diet.

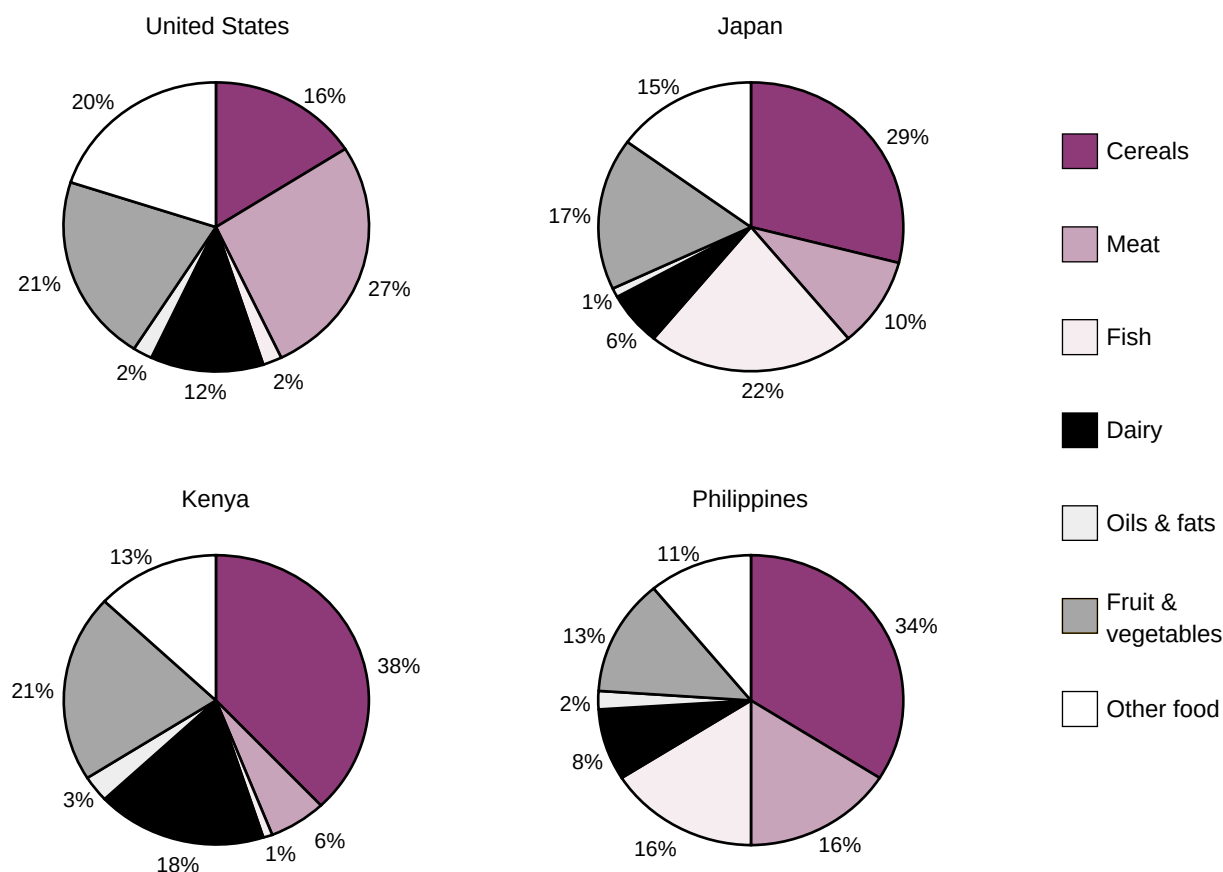
² Fruit and vegetable budget shares in figure 2 include expenditures on roots and tubers, which are generally cereal substitutes in poorer countries. This may have contributed to relatively high fruit and vegetable budget shares in Kenya and the Philippines.

While increases in income have enhanced food purchasing power, better trade and transportation have improved its selection and availability. The role of improved transportation and infrastructure facilities in changing the composition of global food trade is discussed in Chapter 4. Besides income and improved transportation, lifestyle changes related to urbanization also determine the composition of the food we eat. Just as our diets are very different from the food our parents and grandparents consumed, diets of an average consumer in New York City or San Francisco may be different from that of an average consumer in rural Georgia or Montana. The effect of urbanization in influencing the composition of food consumed by individuals is examined in Chapter 3. This chapter focuses on a global analysis, examining how the impact differs among low-, middle-, and high-income countries.

Alternative demands on time in fast-paced, more affluent, dual-income urban households may result in urban consumers preferring higher valued and more processed food that requires less time for preparation. With food-retail and restaurant chains operating nationwide, mass-media advertisements, prevailing popular culture, and instantaneous transfer of information with modern technologies, food consumption is undergoing changes in all areas of the country, as well as beyond its borders. Along with the export of popular American culture, the United States also exports its food and eating habits to various urban centers around the world. Therefore, the United States plays a very important role in shaping the diets of individuals in many countries. Both bulk and prepared U.S. agricultural products are exported worldwide, and U.S. fast food chains dot the urban landscapes in cities all over the world. An examination of current U.S. food consumption patterns can therefore provide some insights to potential changes in future food consumption patterns in developing countries as income levels increase. Given that meat and fresh produce consumption will likely increase with income, Chapters 5 and 6 examine the factors shaping current U.S. demand for these products.

Finally, when the basic demand for a well-balanced meal are met, further increases in income result in demand for other 'quality attributes' in the food we consume. The demand for 'quality attributes' in developed countries has escalated in recent years due to increased media attention and public awareness resulting from various incidences of large-scale food contamination. Consumers in developed countries are

Figure 2
Global food consumption patterns
Food item share of total food budget



Source: 1996 International Comparison Project Data. The World Bank.

increasingly demanding food products perceived to be safer, specifically products that are free from disease-causing organisms, chemical residues, and that are not produced using any chemical inputs or genetic modifications. Some American and a large number of European consumers are additionally demanding food from animals that are raised in a humane environment. These domestic demands have led to policy changes at the national and some at the international level. What implications do such policy changes have for future

trade and the supply and demand of food? These issues are presented in Chapters 7 through 9.

In response to consumer demand for quality, food industries in Europe and to a smaller extent the United States have designed quality assurance systems that guarantee quality attributes in food products. Issues concerning such schemes and examples of quality assurance schemes are presented in the final chapter of this publication.