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Why People Eat What They Eat Around the World

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"You are what you eat." It may not be factual, but it does provide a basis for discussing food consumption patterns. It is a fact that quality of life, work habits, and productivity relate directly to the quantity and quality of the diet. In many cases, the diet is so rich in substance and volume that people get fat and suffer for it. In other cases, people get enough to eat, but are grossly short of essential nutrients to keep them healthy and productive. Finally, some diets are simply inadequate to live on, resulting in malnutrition and death. The rather elusive concept of a balanced diet consumed in the appropriate amount is a stated goal of most people, but many diets fall short for various socioeconomic, political, cultural, and educational reasons.

In most environments, a balanced diet is a moving target with its composition heavily dependent on a particular individual's needs, the geographic and seasonal availability of foods, and a market which sets values based on both the demand and supply of foods and related marketing services. In some countries, diets are developed from a few staple foods. In others, the variety of foods is

great. The flexibility of combining foods to construct a balanced diet is apparently great. Generally, particular tastes and preferences can be accommodated in a market economy without greatly sacrificing diet quality. In many centrally planned economies, the variety of products depends on government intervention policies, but usually, enough products are available for people to have wholesome diets. Foods also compete with many nonfood and industrial products for consumers' incomes.

The proportion of consumers' budgets spent on foods and food-related services varies greatly among countries. In the United States, less than 20 percent of a person's income is required to purchase about 1,425 pounds of food annually. The protein and calorie levels resulting from this food package are very high and of generally high quality.

At the other extreme are some African countries. There, the volume and quality of food are extremely low, but it takes a large share of one's income anyway. This situation typifies about 70 countries which get substantial amounts of food aid. Food aid is an important factor in determining their con-

sumption patterns.

A step higher on the economic ladder are higher income countries that have to buy much of their food elsewhere. They are influenced heavily by changes in world commodity and financial markets.

In all these cases, a country's exchange rates, the extent of its debts to others, and world commodity prices become important in determining food consumption levels and patterns.

Varied Eating Patterns

Regional differences in food consumption are great both in terms of types and quantities of food consumed.

Cereals. As the most important food source for most consumers around the world, cereals exemplify both changing patterns and regional differences. Per capita cereal consumption has changed only slightly since 1970. Most of this growth came from increased livestock feeding of coarse grains in the developed and centrally planned regions and increased food grain consumption in the developing regions.

The importance of each cereal varies greatly from region

to region. For example, wheat is the predominant food grain in the temperate zones, rice holds this position throughout most of Asia, corn takes over in the subhumid tropics of Latin America and Africa, while sorghum and millet are the main staples in the arid regions. In other regions, roots and tubers take the place of grains. Cassava, for example, is the principal crop in parts of Africa, Latin America, and Oceania, where climate and prevailing rainfall patterns hinder cereal production.

Meat and Poultry

Consumption of selected animal products has grown the most in recent years. In particular, per capita consumption of poultry has climbed steadily and shows few signs of abating. Pork consumption likewise grew rapidly until 1980, then began to wane. Just as for the grains, there are major regional differences in the consumption of animal products. Beef consumption is greatest on a per capita basis in developed countries and a few developing countries, e.g. Argentina. On the other hand, pork consumption, at least on a per capita basis, has been falling in many developed countries, while ris-

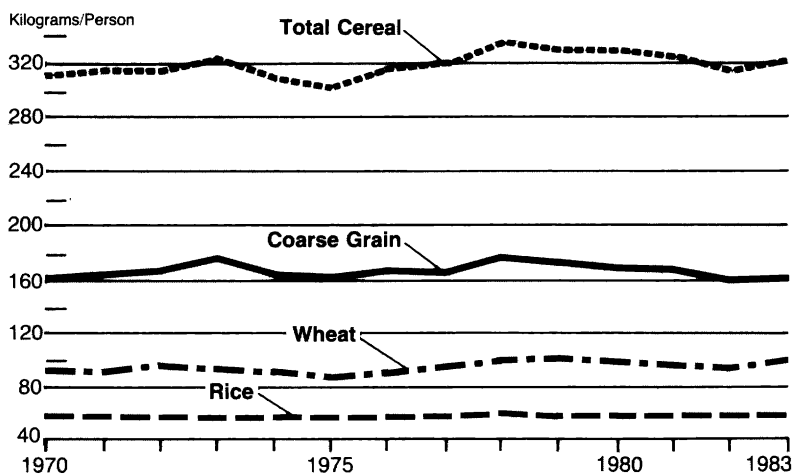
ing in the Eastern bloc, China, and parts of Latin America and Asia. Poultry consumption has grown rapidly in most countries, but actual levels of consumption vary greatly. For example, we eat 64 pounds per capita in the United States. Those in North Africa and the Middle East average less than 4.4 pounds.

Recent changes in the consumption of other food products vary greatly from commodity to commodity. For example, the use of oilseeds, such as soybeans, grew rapidly during the 1960's and 1970's. Much of this happened when people ate more animal products, boosting usage of oilmeals in mixed feedstuffs in the production of livestock products.

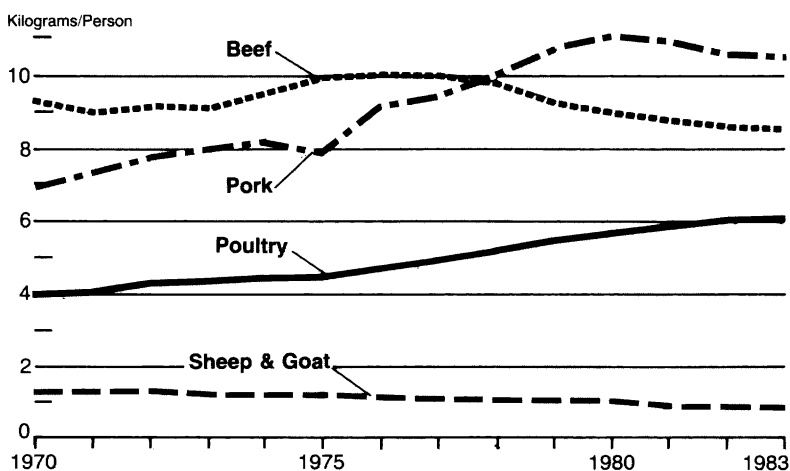
Sugar is a far different story. World per capita consumption of sugar—an important product in many countries simply because of the calories it contributes to diets—climbed only 1 percent annually. Finally, people cut down on some products, especially traditional foods such as roots and tubers and pulses, because they were able to switch to other foods.

Processed Foods. Foods themselves have undergone major transformations in recent decades. In particular, more

World Per Capita Cereal Utilization (1970-83)



World Per Capita Meat and Poultry Utilization (1970-83)



and more consumers in the developed countries are eating away from home more often. In many countries—rich and poor—foods that are eaten, whether at home or in restaurants, receive considerably more processing than they did in the past. Processing gives consumers who can afford these services a way to spend less time preparing food. With more and more women—even in developing countries—working outside the home, such foods take on an added importance in the diet.

Processed and prepared foods, however, are only available if there is an infrastructure that supports their production and distribution. This is certainly the case in the developed countries, most of the European centrally planned countries, and increasingly in the urban areas of the developing world. In these cities, not only have processed and prepared foods replaced many of the traditional foods, but Western-style fast food restaurants are coming in, too.

Why Different Patterns Exist

Why do consumption patterns and levels vary so greatly from

country to country? The answers rest in differences in economic, political, and sociological characteristics. Here are several: individual commodity prices, the prices of other commodities, particularly those of closely related goods, the level and distribution of incomes, population characteristics, tastes and preferences, and a wide range of institutional arrangements to regulate political, economic, or sociological behavior.

It has long been known how these factors relate to consumption of foods and other commodities. The principles apply in those countries where consumers exercise freedom of choice as well as in most centrally planned countries where choice is restricted. Economists are busy refining and estimating the relationships implied by these well-conceived principles. Let's examine a few.

Prices. The price of any product is inversely related to the quantity consumed. The amount of food products consumed, however, will not change as much as the amount of nonfood products in response to a given change in price. In fact, for few agricultural commodities will a price change cause a proportionate



Les Shepard

Consumers substitute one commodity for another when prices change. When the price of one goes up, the consumption of others tends to rise.

or greater change in quantity consumed.

On the other hand, the relative prices of many foods do affect each other greatly. Consumers will substitute one commodity for another as the price relationships change. When the price of one goes up, the consumption of the others

goes up, unless the foods are normally served together.

The wide variety of commodities to choose from in developed countries results in higher response relationships than in most developing countries. In the latter, consumers depend on a few essential commodities, such as rice in Asia and corn in Africa. So they cannot easily switch if prices change. In the centrally planned countries, where prices are rigidly controlled, consumers may protest government-announced price increases, but consumption of other products is usually not greatly affected when the price of one product changes.

Income. For most agricultural commodities, higher incomes lead to more consumption. The strength of this relationship declines as per capita incomes increase. The consumption of meats, fruits, and many vegetables usually changes more in response to income changes than the consumption of most cereals.

Over the last several years, the quantity of marketing services demanded by consumers has been particularly responsive to income changes and is one of the reasons for the rapid growth of convenience foods



and eating out, particularly in the richer and faster growing countries.

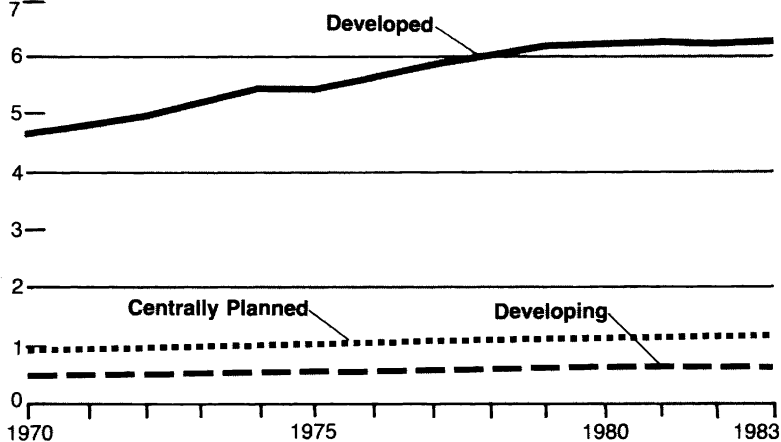
The distribution of income within a country is also an important determinant of consumption. Adequate food to ensure at least a minimum diet is considered an essential household expenditure in all societies. In industrialized countries, income is sufficient to ensure adequate purchasing power for foods. In a country like the United States, where only about 15 percent of income goes to purchase foods, distribution is not as important as in the developing countries,

The quantity of marketing services demanded by consumers has been responsive to income changes and is one of the reasons for the rapid growth of convenience foods and eating out.

where a much higher proportion of income is used to purchase foods. In the latter, income for food is not only low, but also distributed disproportionately. Therefore, the actual purchasing power of most households is very low. Finally, growth in incomes in recent years has lagged in the developing and centrally planned countries, undoubtedly a major constraint to growth in their food consumption.

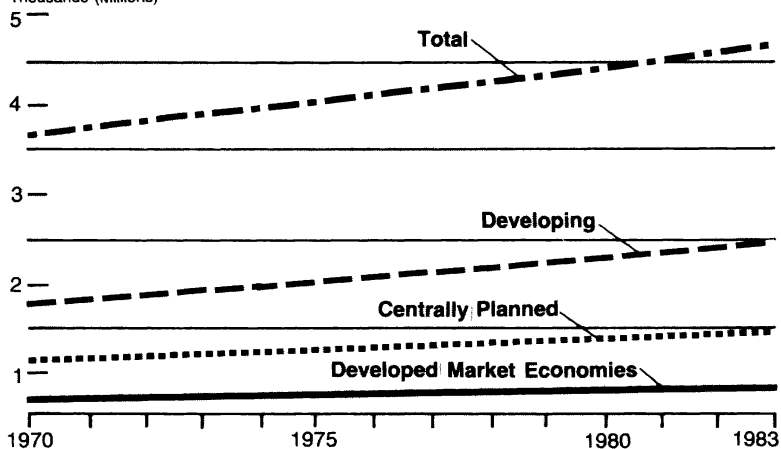
Real Per Capita Gross Domestic Product (1970-83)

1975 U.S. Dollars
(Thousands)



World and Regional Population (1970-83)

Thousands (Millions)





FAO

Population. Increases in population are directly related to increases in total food use. Per capita food consumption does vary as the age of the population shifts by either an increase in the birth and survival rates or a change in life expectancy. Per capita consumption tends to be lower for the very young and the elderly.

The high birth rates of most of the developing world have greatly increased populations in these countries. This growth also has effectively lowered the average age of the population and whetted the demand for specific foods like dairy products and selected cereals. The net result has been an increase in total consumption in those

The increase in a country's population directly relates to the amount of food consumed. China, with the world's largest population, has made spectacular agricultural progress since 1978.

countries with purchasing power.

Characteristics of the work force are also important in determining food consumption. Type of employment (blue-collar versus white-collar occupations, rural versus urban, and the dictates of a country's climate) affect consumption patterns. Many developing countries are in the semitropical and tropical zones, with a large agricultural base. Consumption of home-produced foods is great. Surpluses of foods, after

meeting at-home consumption needs, are low, thereby expanding the need to import many commodities as the urban population expands. In many developing countries, the urban population is growing rapidly, and domestic agricultural production cannot keep up with domestic food needs.

An additional consideration is the rapid growth of the percentage of women working outside the home. This, in itself, is an important force underlying the rapid increase in demand for food marketing services in the form of prepared meals and restaurant services.

Tastes and Preferences.

Just as food consumption levels differ among regions of a particular country and among countries, tastes and preferences may also differ because of religion, family living patterns, employment, education, age, and other socioeconomic factors.

Obviously, relationships also exist between the foods consumed and the adaptability of products to local growing conditions. For example, tropical fruit consumption per capita is greater in the tropical zone than elsewhere. But the relationships may not be as obvious as they appear. The de-

gree to which tastes and preferences adapt to the products locally produced and to which they, themselves, determine the available products remains largely unknown.

In other countries, some foods are not commonly eaten because of religious beliefs. Beef in India and pork in many Middle Eastern countries come to mind. Vegetarian diets are becoming common in many countries, including the developed countries. Such diets demonstrate how health concerns have altered consumption patterns—the red meats, eggs, and dairy products are examples of recent losses due to consumer health concerns.

Institutional Policies and Other Factors. Food consumption patterns have been affected by many government interventions in most, if not all, countries. In the United States, the interventions have taken on many different forms including food safety and quality regulations, food stamp and other food assistance and surplus disposal programs, school lunch programs of various types, and a variety of research and extension education programs designed to help in the preparation, preservation, and presentation of foods. Food ad-



Dana Downie



Yuen-Gi Yee

vertising and promotion activities are common in many countries.

Such programs are present in many developing countries, where consumers are also subsidized by institutionally controlled prices below market clearing levels, particularly for staple products like bread, rice, sugar, and cooking oils. While this may be beneficial to urban consumers, farmers and marketing agents are discouraged with prices unfavorable for ex-

Tastes and preferences are important determinants of consumption. For example, tropical fruit consumption is greater in tropical zones than elsewhere. A consumer purchasing tropical produce in Singapore.

A grader with USDA's Agricultural Marketing Service monitors oranges being processed at a plant in Florida's citrus belt.

panding production. Consequently, shortages of locally produced foods develop. Foreign exchange is often needed to finance imports and relieve food shortages that could have been averted at far less cost.

Consumers in the developing countries also suffer from the low turnover volume and wastes of primitive marketing systems. Marketing costs of moving the product from the producer to the consumer are high and have a major effect on reducing the food choices of these consumers.