Earth to supermarket: Why does food cost so much?

This is the seventh in a series of 15 articles exploring "Food and People."

In this article, Dean Dan Padberg of the College of Food and Natural Resources, University of Massachusetts, discusses the factors that add to the cost of food from the farm to the supermarket. Padberg, previously a professor of Agricultural Economics at the University of Illinois and at Cornell University, is a consultant on food to several government agencies. He is author of more than 100 articles and two books, "The Economics of Food Retailing" and "Today's Food Broker: Vital Link in the Distribution Cycle."

This series was written for Courses by Newspaper, a program of University Extension, University of California-San Diego, with money from the National Endowment for the Humanities.

By Dan Padberg
special writer

food and people

THE FOOD INDUSTRY is our largest industry. It feeds our population on roast beef and apple pie, together with fast food, junk food, and convenience food.

It is easy to condemn our food system for exacting too high a price, not only in monetary terms, but also in terms of the wholesomeness of our diet.

Pointing to the profits made at each step from farm to supermarket shelf, critics argue that food should not cost so much in a land of plenty.

As we judge this system, however, we should keep in mind how consumers behave and which types of products they buy and make profitable.

We all properly associate our food with the land. American agriculture is enormously efficient: The average farmer feeds his own family and at least 40 other families in this country and abroad.

AGRICULTURE OR agribusiness, as it is often called today, is without question primarily a business for profit. This is nothing new. Food has been produced for profit for hundreds of years.

Most of the cost of food today, however, is not in the labor of growing it on the land. Most of the cost is in transportation, processing, packaging, advertising, distribution, and marketing — in other words, everything that happens to food from the farm to the consumer.

Agriculture employs only about 3 percent of the total U.S. labor force; the food chain, from the farm to the store shelf, employs about 20 percent.

Are the costs associated with this large food industry really necessary?

LOW-COST FOOD ALTERNATIVES

Most of the human race lives on diets much less expensive than our own. The average annual income of three-fourths of the world population is less than $500 per person. They eat primarily grains and vegetables, which, supplemented with very small amounts of dairy and meat products, can provide optimal nutrition at very low cost.

Are our consumers denied this choice? Not at all.

Probably every supermarket in America has dried beans and some of the other elements of a subsistence diet. If these products were in large demand, they would be provided in greater quantity and variety.

While it is interesting to think about a subsistence diet in America, it is not very relevant within our economy. The U.S. population was the richest in the world at the end of World War II. Since then, average real income (after taxes and inflation) has doubled, so that our generation has twice the spending power of our parents.

WE DON'T want to consume twice as much of the simpler foods they ate; we want more convenience and variety. We eat away from home more frequently.

Even the welfare family has little interest in the staples of the subsistence diet eaten by most of the world's population.

We don't want the cheapest possible food supply. In our affluence, we want to be pampered but at a reasonable price.

It is difficult, however, to find sensible rules for a food supply in an affluent society. Our interest in variety, convenience and status encourages unnecessary cost in advertising and packaging, and low-volume specialty products.

Yet these activites are unavoidable unless we want to go back to a diet of staple food products.

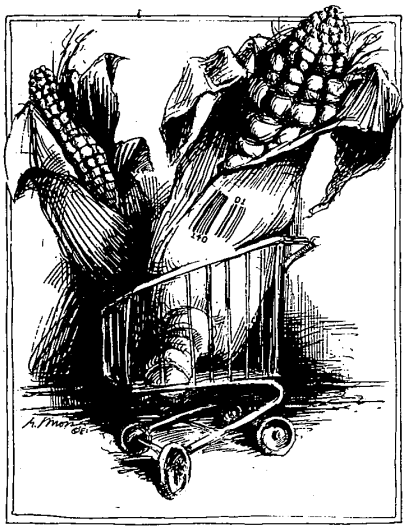
THE COST OF CONVENIENCE

In order for us to have the convenience that our busy and affluent population seems to demand, food often must be cooked in the factory rather than in the home kitchen. The product must be packaged, transported and distributed in very small (one-meal size) quantities.

Consider the marketing cost differences between flour and other ingredients for bread and the finished product. The ingredients can be transported inexpensively.

Packaging of bread, however, is very expensive. There is waste when bread goes stale. Bread takes a lot more shelf space in a store than flour and yeast.

Clearly, we pay more for our diet by buying bread rather than its ingredients, and most of the cost is related to marketing the finished product. Few would argue that the store product is superior to home-baked bread, but it is more convenient.



THE COST of convenience foods is also affected by confusion about prices and vaules. Previous generations bought staple food products by the pound and had a good idea what a fair price was for their more important purchases.

But what is a fair price for baked or frozen finished products? You buy chicken by the pound, but how do you buy a chicken TV dinner?

The few ingredients that grandmother bought could be made into hundreds of finished products. Now these products are increasingly made in the factory. While we like the variety, it is not easy to be wise shoppers.

We can't analyze each choice, for there are many thousands of choices in a single supermarket. Yet there are some good shopping habits that may be helpful.

WE CAN be aware that most new products are introduced by the largest companies with big advertising budgests and well-known brand names.

On the other hand, most of the largest supermarket chains have their own store brands and the new generic, plain-lable food products.

Both the house brands and the generic products are economy oriented. Their quality is reliable, and the savings are large.

The aware consumer can thus choose among exotic and expensive products or economy alternatives.

CONSEQUENCES OF AN INDUSTRIALIZED SYSTEM

Higher cost is only one consequence of food preparation in the factory. It also changes our diets and perhaps our values. Only the prepared foods are highly advertised.

Fresh fruits and vegetables are usually offered in the market by smaller firms and with less "product development," packaging and advertising.

Because of the exciting sales activities for processed foods, we may shift away from fresh products faster than we otherwise would or when we should. We also may shift more to snack foods and away from balanced meals.

Both of these dietary shifts involve less work at home.

The use of additives for preserving prepared foods is another consequence of an industrialized food system. We may be increasing our vulnerability to cancer-causing substances without even knowing it, because some of these effects become apparent only after years of exposure.

THE ADDITIVES put into finished food products to preserve them (such as nitrites) and to color them (such as Red Dye No. 2) are a continuing concern to many Americans as well as to the regulatory agencies responsible for the safety of our food supply.

The trend toward prepared foods and the big business firms that produce them also affects local food producers.

When consumers used to buy staples, local producers could often be significant food suppliers. The more specialized system of today wants to buy food supplies in very large quantities.

For this reason, the most efficient production regions are favored. Some vegetables for processing are concentrated along the northern border of the United States.