

Convenience Foods – What They Cost You

By Dianne Odland and Julein Axelson

Convenience foods have earned themselves a regular place on the shopping lists of many consumers. In fact, convenience foods of one type or another are probably used by nearly all households in the United States.

Convenience foods include a wide range of products that have been fully or partially prepared by food manufacturers rather than in the home. In effect, convenience foods include all products except fresh items such as meat, produce, and eggs and basic processed food items that are used as ingredients, such as flour, sugar, fluid milk, butter, and spices.

A recent U.S. Department of Agriculture (USDA) survey including over 14,000 households showed that about 45 cents of every dollar spent for food at home was for convenience items. Some households relied more heavily on use of convenience foods than others. For example, the survey showed that convenience foods accounted for more of the food dollar in households with higher rather than lower levels of income and education.

Younger people and adult males who prepared household meals spent a greater percentage of the food dollar on convenience products than older people and female adults. On the average, a larger share of the food dollar was used for purchase of convenience foods in white households than in black households and by people in the Northeast than by people in other regions of the country.

Understanding the differences in types of convenience foods on the market can be helpful in making food buying decisions. Convenience foods can be classified as either basic, complex, or manufactured. *Basic* convenience foods are products in which basic processing techniques such as canning, freezing, or drying have been applied to single-ingredient items or products with a limited number of ingredients. Although these foods may save some preparation time, they do not have built-in "culinary expertise." Examples include instant dry potatoes, canned green beans, and frozen orange juice concentrate. Many of the basic-type convenience foods are vegetable and fruit products.

Dianne Odland is a Home Economist, Consumer Nutrition Center, Human Nutrition Information Service.

Julein Axelson is an Assistant Professor, Human Nutrition and Foods, Virginia Polytechnic Institute and State University, Blacksburg.

Complex convenience foods include multi-ingredient “prepared” mixtures that usually have a high level of timesaving features and culinary expertise. Some examples include frozen ready-to-heat plate dinners and entrees, frozen vegetables with a sauce or in a casserole, and ready-to-eat baked products. *Manufactured* convenience foods have no home-prepared counterparts. Products in this category include foods such as ready-to-eat cereals, crackers, some candies, carbonated beverages, and most alcoholic beverages.

Households in the survey spent about 42 percent of their convenience food dollar on basic items, about 42 percent on complex items, and about 16 percent on manufactured items. Basic convenience food products that were used by a large percentage of households included peanut butter, frozen orange juice concentrate, pasteurized process cheese, instant coffee, and several canned and frozen vegetables. Commonly used complex convenience foods included white bread, luncheon meats, canned baked beans, dry mix for macaroni and cheese, canned soups, jellies and jams, and ready-to-eat cookies. Cola-type carbonated beverages and alcoholic beverages represented a large portion of the money spent for manufactured convenience foods.

What Makes Foods Convenient?

Changing lifestyles in the United States and an increased variety of convenience foods available have led to increased use

of many kinds of convenience foods. In the modern household, everyone’s busy — homemakers often work outside the home, and meals are not always eaten at set times or as a family. Time is at a premium. Frequently, eating becomes a rushed affair and there is little time to prepare elaborate meals. Preparing, eating, and cleaning up after meals must fit into busy schedules. Many convenience



Which to buy . . . a readymade cake or a cake mix? The dry mix in this homemaker’s left hand contains all the dry ingredients to make a cake. However, it must be mixed and cooked to achieve a ready-to-serve form. The cake in her right hand is already made and ready to eat.

foods offer ways to save time and effort by eliminating preparation activities such as cleaning, peeling, mixing, and cooking. Also, their use substantially reduces pre-preparation chores (such as planning, buying, and storing ingredients) and clean-up chores (such as dishwashing).

Convenience foods have varying degrees of built-in services. The built-in culinary

expertise offered by some products is convenient for people who lack food preparation skills or who have little equipment available for preparing foods. Convenience foods may expand the variety of foods served in such families.

The ultimate in convenience is offered by products that are ready to eat or use as purchased. Some products need only to



William E. Campilan

be thawed before serving; some are prepared items which need only heating or rehydrating with hot water. Others, such as dry mixes that have most of the required ingredients assembled in one package, must be mixed and cooked to achieve ready-to-serve form. Several convenience forms, offering varying degrees of "readiness," are available for some foods. In fact, often the decision is not so much whether to buy the convenience product or to prepare the food from scratch, but which convenience food form to buy.

Besides laborsaving and timesaving advantages associated with food preparation, other desirable features of convenience foods include ease of storage, change in storage space requirements, ease in transporting the food from the grocery to the home because of lighter weight or reduced bulk, and extended storage life compared to fresh foods.

Small Households — Single-portion packages of entrees and snack items and small containers of fruits and vegetables are tailor-made for one- or two-member households and thus offer convenience to this group, particularly since many fresh foods and many recipes for home-prepared foods provide too many servings to be practical. Their use, especially in small households, may reduce leftovers and decrease the chance of waste.

Making Cost Comparisons

Rising food prices and the seemingly unlimited choice of convenience foods available at the supermarket complicate food buying decisions. Some convenience foods are far more expensive, some cost about the same or even less than similar foods prepared at home. In selecting food forms, be sure the cost of the item

is appropriate for your food budget and that you're not paying more for convenience than you intend. In making cost comparisons, remember that many factors influence the cost relationship between home-prepared and convenience food forms. These include price in the store where purchased; "special" prices of items; brands selected; quality and packaging of items selected; and type and quantity of ingredients in convenience products compared to those used in home recipes.

The following general guidelines illustrate basic cost relationships for equal amounts of convenience foods and their fresh or home-prepared counterparts. They are based on prices for items in three Washington, D.C., area supermarkets in June 1982. Relative percentage costs are based on equal weight servings of each food form.

- Basic-type convenience foods, particularly vegetables, often cost less than their fresh or home-prepared counterparts. An important point to remember, however, is that cost comparisons between fresh and processed produce items depend upon seasonal price fluctuations. Fresh fruits and vegetables in season are sometimes available at bargain prices and may cost less than processed food forms.
- Complex-type convenience products that offer a high level of culinary expertise often cost more than similar foods made from home recipes. Main dishes and baked goods made from a mix often cost about the same as or less than their homemade versions. In figuring comparative costs, remember to include ingredients that must be added to mixes.

Cost Comparisons — Basic-Type Convenience Foods

	Relative cost
	Percent
Fresh green beans	100
Canned green beans	62
Frozen green beans	90
Home-prepared french-fried potatoes	100
Frozen french-fried potatoes	83
Juice squeezed from fresh oranges	100
Ready-to-drink orange juice	
reconstituted from frozen concentrate	65
Pasteurized orange juice	86
Canned orange juice	63
Frozen orange juice concentrate	46
Fluid skim milk	100
Instant nonfat dry milk	65

- Manufactured-type convenience foods such as carbonated and alcoholic beverages offer calories but little in the way of nutrients. They are expensive “extras.” If you need to trim your food budget, this might be a good place to start.
- Some items have more than one convenience food form (pizza is an example). Those with more built-in convenience usually cost more.
- Buying the large rather than the small container size of a convenience food sometimes results in worthwhile savings. Unit prices posted on the shelves of many supermarkets can help you find the most economical size to buy. Buy only what you can store properly and use without waste, though. Buying

large containers doesn't save money if the food spoils before you use it.

Prices differ from store to store and from brand to brand. Some price differences may be associated with food quality differences; others may not. Store brands and generic foods (no brand name shown) often cost less than widely known products. For example, generic green beans priced in Washington, D.C. area supermarkets cost about three-fifths as much as a nationally advertised brand.

Fuel You Use, and Your Time

Usually the largest cost in preparing a food at home is for ingredients, but it is not necessarily the only cost to consider in making food purchase decisions. You may also want to consider the cost of fuel for preparation and the value of the

Cost Comparisons — Complex-Type Convenience Foods

		Relative cost Percent
<i>Main dishes</i>	Homemade fried chicken with mashed potatoes and carrots	100
	Frozen, ready-to-heat fried chicken plate dinner	144
	Homemade lasagna	100
	Frozen lasagna	144
<i>Vegetables</i>	Fresh broccoli with butter sauce	100
	Frozen broccoli with butter sauce (boil-in-the-bag)	180
<i>Baked products</i>	Homemade white bread	100
	Ready-to-eat white bread (firm-crumb type)	227
	Ready-to-eat white bread (soft-crumb type)	82
	Homemade waffles	100
	Frozen waffles	268
	Homemade apple pie	100
Ready-to-eat apple pie	185	

Cost Comparisons — Convenience Items Made From a Mix

	Relative cost Percent
Homemade chili-macaroni	100
Chili macaroni from a mix	116
Homemade macaroni and cheese	100
Macaroni and cheese from a mix	33
Homemade pancakes	100
Pancakes from a mix (just add water)	102
Homemade chocolate cake	100
Chocolate cake from a mix	53

Pizza Cost Comparisons

	Relative cost Percent
Homemade pizza	100
Pizza from a mix	144
Frozen pizza	179

Pizza Cost Comparisons (includes cost for food and active preparation time)

	Relative cost Percent
Homemade pizza	100
Pizza from a mix	82
Frozen pizza	88

time you spend preparing the food. Even though the cost of fuel is a delayed cost and is usually insignificant compared to the cost of food ingredients, you may want to consider it if cost is the primary basis for food purchase decisions.

Foods cooked on the stovetop usually require less fuel for preparation than those cooked in a conventional oven and, of course, longer cooking periods at higher temperatures require more fuel than shorter periods at lower temperatures. Thus, comparing the amount of fuel required for preparing home recipes versus convenience products depends on cooking methods as well as times and temperatures used for cooking. Many convenience foods require about the same or less fuel than similar foods made from a home recipe. Ready-to-eat convenience foods, of course, require no fuel for home preparation.

The Time Factor — Because most convenience foods require less preparation

time than their fresh or home counterparts, the cost of labor for preparing convenience products at home is sometimes appreciably lower than for preparing similar foods from a recipe. Recent studies by both USDA and the Virginia Polytechnic Institute and State University show that if the cost of preparation time is added to food costs, many convenience foods become less expensive than their homemade counterparts.

The cost of time is a theoretical rather than a real, out-of-pocket cost. However, assigning a monetary value to the worth of your time may be helpful in weighing alternatives. The 1982 Federal minimum wage was used in calculating cost for the second pizza example. Calculations were based on the time for all preparation steps that require full or partial attention (active preparation time). Time for steps such as baking were not included since "the cook" is free for other activities.

Family food preferences need to be con-

Container Size Cost Comparisons

	Relative cost Percent
Peaches — 29-ounce can	100
Peaches — 16-ounce can	131
Peaches — 8-ounce can	211
Peaches — individual serving containers	210

sidered in determining the acceptability of convenience foods. The best way to determine whether a product suits you is to try it. Some items may not live up to your standards. For example, you may prefer more of an ingredient such as meat, poultry, fish, or cheese than is provided by a convenience entree. Or you may prefer the appearance, texture, and/or flavor of fresh or homemade foods. If your cooking skills are limited, however, some convenience products may be superior to homemade versions. Although some convenience products may be less acceptable than foods you prepare yourself from home recipes, they may be satisfactory on occasions when limited time is available for food preparation or if their cost is low enough.

Nutrition, Additives

Many consumers are concerned about the nutritional quality and healthfulness of processed foods. Some are particularly uneasy about the use of food additives. Many convenience foods are similar in nutrient content to fresh or home-prepared foods; others may differ. Fresh fruits and vegetables are usually at the peak of their nutritional value immediately after harvest. Food processors make every effort to preserve them while they are fresh to assure the best quality. As served, there is not a great deal of difference in the nutritional content of

fresh, canned, and frozen vegetables. Fresh fruits at their peak, however, may be higher in some vitamins than frozen and canned fruits.

The overall nutritional content of *complex* convenience products compared to similar home-prepared foods depends primarily on the ingredients used. The composition of convenience foods sometimes differs from products prepared from typical home recipes. For example, some convenience entrees contain a higher proportion of components such as pasta or sauce and a lower proportion of meat, poultry, fish, or cheese than their home-prepared counterparts. Therefore, they may provide less protein, vitamins, and minerals.

Some convenience foods may contain more fat, sugar, and salt than foods made from scratch. However, in response to consumer concerns regarding excessive consumption of these substances, many food processing companies are beginning to reduce the amount of fat and salt in complex convenience foods such as soups, beef stew, and boil-in-a-bag foods and the amount of sugar in canned fruits and dessert items.

Food additives are frequently used in convenience foods to maintain nutritional content; improve keeping quality; en-

hance appearance, texture, and flavor; and aid in processing. For example, mold growth on bread and other baked products is controlled by use of mold inhibitors, and the quality of gravy in dishes such as frozen meat pies or the filling in frozen fruit pie is improved by using specially developed starches that can withstand freezing and thawing. The safety aspects of food additives, such as these, are under continuous review by the Food and Drug Administration (FDA).

You have more control over composition if you prepare food yourself. Therefore, if you and your family have dietary restrictions or are concerned about the amounts of substances such as fat, sugar, sodium, and additives in food, you may prefer to prepare foods yourself.

Keep in mind that the total nutritional quality of your diet depends more on the combination of foods you select over a period of time, rather than on whether you use convenience foods or not. The best way to ensure a nutritionally adequate diet is to include a variety of food items in your meals. Build your meals around a varied selection of vegetables and fruits; whole-grain and enriched breads and cereals; milk and milk products; and lean meat, poultry, fish, and dry beans and peas.

Making the Final Decision

Which food form to buy is a personal decision. You must weigh the benefits and disadvantages of buying alternative food forms. Every family has different priorities and different expectations from the food products purchased.

Although cost may be a major consideration in making food choices, it is not always the only one. For example, even at a higher cost than similar foods prepared at home, some convenience products may be a good buy if they suit your individual needs. By the same token, convenience products that are much less expensive than home-prepared foods may *not* be a good buy if you are not satisfied with their quality, if they don't contribute significantly toward your planned nutritional intake, or for other reasons.

Answering the following questions will help you determine whether a convenience food is suitable for you and your family's use: Will the convenience food form save a significant amount of preparation time over preparing the product from scratch or from alternative convenience food forms? Will the product provide the desired number of servings? Are facilities available for proper storage of the product? Will eating quality of the product be acceptable to your family? How will the food contribute to the nutritional quality of your meals? Does cost of the food fit into your family food budget?

If you like the convenience features of products but think they cost too much, or if you prefer homemade quality, you can always make your own convenience foods. When you have time, prepare extra food and freeze in the desired portion sizes for use on occasions when you're in a hurry. Pancakes, waffles, dinner rolls, plate dinners, spaghetti sauce, and lasagna are examples of convenience items you can make yourself.