CONSUMER COSTS OF POTATO PROCESSED PRODUCTS

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Processing has saved the potato industry from declining consumer consumption. At least this is one inference to be drawn from the statistics on comsumption over the past 50 years. Let's look at per capita comsumption figures:

Year	Annual Per Capita Consumption[a]
1910	198 lb.
1920	140
1930	132
1940	123
1950	106

After 1950 the trend was stopped:

Year	Annual Per Capita Consumption[b]
1951	114
1953	108
1955	109
1957	109
1959	107
1961	113

Many reasons have been given for the decline in per capita consumption:

Decreasing caloric needs because people were doing less physical work. Increasing emphasis on weight control. The availability of a much wider variety of food stuffs to consumers. They all boil down to one fact of importance to the potato industry--Consumers by their purchases were indicating that they wanted fewer potatoes in the form in which the market was supplying them.

How was the trend toward lower consumption stopped? One explanation is that consumption had declined about as far as it would. Most students of the potato industry believe that changing the form of the potatoes offered in the market had something to do with it. A pretty good case can be made for this viewpoint on the basis of the following:

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a/ An Economic Study of the U. S. Potato Industry, Agricultural Report No. 6, U.S.D.A., Economic Research Service.
b/ Ibid.

Change in Per Capita Consumption from 1956[a]

Year	Decrease in Fresh	Increase in Processed	Net Change
1957	0.9 lb.	1.9 lb.	+1.0 lb.
1958	2.8	4.9	+2.1
1959	5.0	8.0	+3.0
1960	6.4	12.7	+6.3

It is apparent that the potato industry has found a way to please the American housewife. In 1961 about 23 per cent of the potatoes used for human consumption were in the processed form, exclusive of potato flour and starch. If we include starch and flour, 32 per cent of the potatoes used by consumers were in the processed form.

Explanations of consumer attitudes, and changes in their attitudes, are for the most part speculative. We don't know exactly why the consumer buys what she or he does. A partial understanding of why consumers have been attracted to processed potato products is found when we look at the cost to the consumer.

Retail Cost Per Serving[b]

	Fresh (cents)	Processed (cents)	Extra Cost Processed (cents)	Minutes Saved
French Fries	5.3	5.6[c]	.3	5.3
Puffs	4.6	5.9[d]	1.3	7.1
Au gratin	5.3	7.5[e]	2.2	2.6
Mashed	2.3	3.4[f]	1.1	2.5
Scalloped	3.6	7.0[g]	3.4	2.6
Boiled whole	2.3	4.6[h]	2.3	1.2
Patties	2.5	5.3[i]	2.8	7.6
Hash browned	3.1	6.6[j]	3.5	6.4

The processed potatoes cost more per serving in all cases--but not much. These are the retail costs per serving. With a family of 4, the housewife could save 1.2 cents by starting with fresh potatoes to make French fries. She could save a good deal more on hash browns -- all of 14 cents.

Another way of viewing the matter is from the standpoint of what it costs for the built-in maid service. By buying processed products, the housewife has hired someone else to assist with the kitchen chores. In the case of French fries, she hired part of the work done at the rate of 3.5 cents per hour; for puffs, 11 cents; for patties, 22 cents; for mashed, 26 cents; for hash browns, 33 cents; and for au gratin 51 cents. The work saved her by buying processed scalloped and boiled potatoes costs the most on a per hour basis -- 79 cents for scalloped and $1.15 for boiled.

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[a] Proceedings of "Twelfth National Potato Utilization Conference," Page 75, Western Regional Research Laboratory, Albany 10, California.
[b] Ibid [c] Frozen [d] Frozen [e] Dehydrated [f] Dehydrated [g] Dehydrated
[h] Canned [i] Frozen [j] Dehydrated

So one question the housewife asks herself is, "Have I anything better to do with my time?" For a large number of women who hold down a job outside the home, you can guess the answer.

For some consumers, the relative costs and savings make the decision. For others there are questions as to taste and appearance. A study was made of consumer acceptance of French fries in Pittsburgh in 1961.[a/] Homemakers who do not use frozen French-fried potatoes were asked why they don't use them. Twelve per cent reported that they were not crisp enough--soggy. Eleven per cent didn't like the taste. It is interesting, however, that 38 per cent had never tried them and 28 per cent thought they were too expensive.

If this study is indicative for other processed potato products, it would appear that time and continued promotion and education will make customers of some of the 38 per cent who never have used them and of those who think the price is too high. For those who don't like the taste, appearance or texture, more work in production research, the processing plant and the laboratory is indicated.

The institutional market has also taken substantial quantities of processed potatoes. In 200 restaurants, schools and hospitals in the Philadelphia area, 39 per cent of their potato use was in the form of processed products.[b/] French fries were most important in restaurants and dehydrated potatoes took first place in the schools and hospitals.

Another advantage processing has secured for the potato industry is increased consumer exposure. A number of studies of consumers have shown that the greater the exposure of consumers to a product in the supermarket, the more likely a sale would be made. In the modern market of today, consumers have literally thousands of items to choose among. With only one product - fresh potatoes - consumer exposure occurs at one place in the store. With a number of processed products scattered throughout the store, the consumer is exposed to your product four or five times rather than once.

The impact of processing has been felt in many ways and many places. The evidence is pretty clear that the trend toward lower per capita comsumption has been halted. Potato growers are able to sell more potatoes than they could without the processed products. New business and new jobs have been created. In potato flake plants alone the investment was $2.5 million by 1959. Annually these same plants were spending $10 million for labor, advertising, packaging materials and other items not including the potatoes. We have no estimates of investment and expenditures by the total industry. At least a part of these expenditures go to potential users of potatoes in one form or another.

The profitability of the processing industry is not public information. Simple processes of deduction would lead us to conclude that profits have been very satisfactory. The reasoning goes like this:

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a/ "Frozen French Fried Potatoes, Effect of Size of Pieces," Marketing Research Report No. 514, U.S.D.A., Statistical Research Service.
b/ "Market Potential for Processed Potato Products," Marketing Research Report No. 505, U.S.D.A., Economic Research Service.

1. Entrepreneurs go into business because they see an opportunity to make a good profit.

2. The potato processing business has expanded rapidly in numbers of plants, size of plants and production.

3. Therefore, the people in the processing business saw an opportunity to make a good profit.

Just in case someone here thinks profit is a nasty word, let's look at the development the other way around: If there had been no potential profit in processing, no businessman would have wanted to risk his capital in a processing plant. There would have been no development of processed potato products. Without the variety and built-in maid services, consumers might well have reduced consumption still more below the 106 pound per capita of 1960. This is the way our competitive enterprise system works.

Another point to be remembered in thinking about the processing industry is the normal pattern of development for a new product or new innovation. When a new product which appeals to consumers is discovered, the market demand is great and supplies are limited. Consumers increase their purchases as rapidly as new plants can be built. Profits are high and more entrepeneurs are attracted into the business. At some point, production catches up with demand and competition between plants reduces profits. In fact, for some plants profits may turn into losses. Finally, the industry stabilizes with the more efficient continuing in business and profits at a level high enough to keep the necessary plants in operation, but low enough to be unattractive to new capital.

There has been a proposal made with respect to processing which worries me. It has been suggested that potatoes for processing be limited to the same grades as are permitted on the fresh market -- generally No. 1's and No. 2's. At first glance the arguments for this proposal seem logical. As I understand it, there are two major points:

1. Fresh marketers are limited in the kind of potato they can sell. Therefore, it is only fair to limit processors in the same way.

2. The elimination of all potatoes which won't make fresh grades at the processing plant will reduce supplies and increase price.

My questions about this proposal deal with what will happen in the processing plant. Will costs per unit of product increase with such a limitation? If so, will the processor pass the additional cost on to the consumer? In most cases, additional costs introduced into the marketing system for a specific consumers' product are passed back to the producer.

To enforce grade regulations on the processor would require sorting and inspection. If this were done before they are delivered to the processor, I assume the farmer would pay for the service directly. If it were done in the plant, the processor would have additional costs for sorting and inspection. In addition, he would have costs for disposal of more waste potatoes. Finally, to the extent that marketable product were reduced for each ton of potatoes delivered, the cost per unit of processed product would increase.

As a grower, I would be concerned about who will pay the additional costs.

You are familiar with the impacts of processing on growers. A potato with very definite characteristics is required. Specific gravity is important. Most potatoes for processing are bought under contract.

In general, it seems to me that the bargaining position of potato growers has been somewhat improved. You still have your fresh market outlets. In addition you have the choice of the processing market. Once a contractor has contracted for his supplies he may not compete directly with the fresh market that year. Nevertheless, they can't stay too far out of line for many years in succession.

Developments of the future could change the bargaining situation. If processors were to take over more of the fresh market in a combination operation, fresh shippers might be crowded out and competition reduced. If there developed a trend toward consolidation or mergers of processors, competition would also be reduced.

As long as competition is maintained in the market, I think potato growers can continue to be competitive. If it is not maintained, I would look for some kind of group action on the part of growers. Group action might take the form of cooperative organizations, bargaining associations or the use of government power in some way to control production and marketing.