

Daniel I. Padberg Non-Use Benefits of Mandatory Consumer Information Programs

Zusammenfassung

Wachsende kritische Einstellung und politische Aktivität der Verbraucher, steigende Konsumgütervielfalt und die Konzentrationstendenzen innerhalb der Konsumgüterindustrie veranlassen die staatliche Verbraucherpolitik mehr und mehr, auf detaillierte warenbegleitende Produktinformation hinzuwirken. Zumeist werden Informationsauflagen so ausgestaltet, daß sie die Verbraucher mit objektiven Fakten versorgen und ihnen die vergleichende Beurteilung der Kaufalternativen erleichtern. Erste Befunde über die Reaktion der Verbraucher auf solche Informationen stützen die Vermutung, daß sie sie zwar schätzen, aber doch mehr als ein Element der Sicherheit und nicht so sehr als Entscheidungshilfe betrachten. Sie möchten sichergehen, daß eine „dritte Instanz“ die wichtigsten Produkteigenschaften überwacht hat. In der Reaktion der Anbieter auf solche Maßnahmen liegt vermutlich deren größter Effekt. Denn der Wettbewerb wird solche Produkteigenschaften stärker berücksichtigen, die durch Informationsauflagen hervorgehoben werden.

Abstract

Government programs requiring detailed information on consumer product labels have become the usual response to: a) the greater awareness and political activity of consumers; b) the greater complexity of consumer products; and c) the emergence of large conglomerate structures within the consumer goods industries. These programs are usually designed by experts to provide consumers with objective facts, presumably to enable analysis of purchase alternatives. Early evidence concerning consumer use of these informative labels suggests that they like them but see them more as an element of security than as an input to the decision process. They want to know that a "third party" has exercised surveillance over important objective dimensions of the products. The greatest effect such programs may have on the market is through the response of manufacturers. The third party identification of particular product characteristics focuses developmental activity on those features.

During the past two or three decades the U. S. food industry has been transformed from the processing and distribution of traditional staples to accommodating an increasing emphasis on formulated convenience foods. The institutional structure of the industry has changed in response to new needs. Small local or regional processors and small business distributors have been replaced by national manufacturing and distribution operations. These changes have signalled concern for consumer protection at several levels. Formulated foods use more additives and bring up questions of product safety. Questions of sanitation and food handling methods have stimulated the promulgation and enforcement of new regulations for both the manufacturer and the distributor.

In addition to regulations which limit and affect the decisions taken at the manufacturing and distribution level, another class of consumer protection policy has emerged to improve the consumer's ability to make an informed purchase decision. Nutritional information on product labels, pricing information on per unit basis and open date codes to give freshness information are examples. Motivation for these

policies has usually taken the form of arguing that consumers lack basic factual information about the very large number of increasingly complex products. Unlike the traditional staples of a generation ago, today's highly processed and complex products are difficult for consumers to appraise from the viewpoint of nutrition, price or freshness.

This direct concern with consumer information is further influenced by a concern for balance and equality. In the previous small business food system, the consumer related to a distributor or sometimes a manufacturer who was also a neighbor. Today's specialized food system places the consumer in an interaction pattern with a large supermarket operation perhaps employing sixty to a hundred people. Functions are sufficiently specialized that the consumer faces sales personnel who have almost no product knowledge. The basic policy governing the supermarket operation is set by the firm's headquarters, perhaps several hundred miles away. The food manufacturer similarly may be a distant large conglomerate corporation which manufactures many things besides food. In addition to the problem of the products being more complex and numerous, the organizational complexity gives the consumer a very great disadvantage in resolving whatever problems may occur with the selection and use of food products.

The basic approach to this situation has been to view economic problems in a free market framework. This assumes consumer sovereignty, i. e., the consumer can make informed choices and by so doing direct the actions of the large and powerful firms in the food processing and distribution industry. This assumption is very important. If for any reason the consumer cannot make informed choices, there seems little prospect that the actions of large and powerful firms will lead to results that are consistent with the public well-being.

THE EXPERIENCE WITH UNIT PRICING, NUTRITIONAL LABELING AND OPEN DATING

Unit Pricing

Unit Pricing became a matter of some interest in the late 1960's. Following great difficulties with attempts to get packaging legislation which would facilitate the consumer's choice, it was generally conceded that a better way would be to require the distributor to provide price information that would allow price per unit comparisons between food products (Ayres & Padberg, 1974). Price per ounce or price per pound (or whatever unit of measure is relevant to the product) was to be required in a labeling scheme in addition to the price of the food package. The method of implementation which gained eventual acceptance required the supermarket operator to place a label on the shelf beneath the product which gave both the price of the can or box and the price for its basic unit of measure. During the early stages of introduction of this idea, some retailers began to experiment with the costs and benefits of such a scheme. In addition, several research studies were conducted to identify the costs and benefits of such a program (Carman, 1973; Isakson & Maurizi, 1973; Lamont, Roth, & Slater, 1972; McCullough & Padberg, 1971; Monroe & La Placa, 1972; Progressive Grocer, 1971, 1972, 1973, 1974; Russo, Krieser, & Miyashita, 1975).

The results of these early studies showed a positive response in terms of consumers'

attitudes toward unit pricing. They seemed to like the idea of basic information being provided by the food distributor. A substantial proportion of consumers said they found the information useful. On the other hand the various research attempts to identify use of this program in terms of changes in consumers' purchase patterns were extremely frustrating. While we may admit to very great difficulties in research design, there has been no verification that consumers in fact changed any purchase patterns as a result of unit pricing. Despite the confusion which resulted from efforts to measure behavioral response, the general observation that consumers liked the program was a signal to the political process. In 1970 Massachusetts passed a law requiring unit pricing and other states and cities followed in 1971. In addition, many food chains voluntarily experimented with unit pricing in areas where it was not mandatory. As a result of these choices, unit pricing has become relatively common during the last five years (Progressive Grocer, 1974). The general results seem still to be very much in the same pattern of the early results – consumers liked it but there is no evidence that their use of it leads to altered purchase behavior.

Open Dating

The experience with open code dating followed rather closely that of unit pricing. Technical problems associated with choosing a rule of freshness dating seemed to make this a much more complex issue than the unit pricing. It was most difficult to decide what sort of date would be most useful and what sort of action should be taken when the date expired. Nonetheless freshness date policy was required in two metropolitan areas and programs were voluntarily undertaken by dozens of food chains involving several thousand stores (Progressive Grocer, 1971; U. S. Department of Agriculture, 1973). The results of these initiatives led to modified control and handling procedures on the part of the supermarket and a generally favorable response in terms of consumer attitudes. Problems associated with food products spoilage was significantly reduced when these programs were adopted. However, in one test the modified handling procedures were adopted without the dating information being provided to the consumer. In this test, problems with products spoilage declined in the same way that it did where the freshness codes were provided to the consumer.

Where consumers were interviewed regarding their attitude toward and use of the program, the results showed that a large proportion of consumers were aware of the program and that over 40 percent of them made use of it. They were further asked in what food product groups the open freshness code had been most useful. In responding, the food group most frequently mentioned had not been in the test at all. Again the evidence in this experience is that consumers have an affirmative response to the information program. On the other hand, there is little evidence that they are very sensitive about using it. The benefits which accrue to the consumer from this program may be more related to the sensitivity it stimulates on the part of the distributors rather than the sensitivity consumers exhibit directly.

Nutritional Labeling

The experience with nutritional labeling followed initiatives in open code dating and unit pricing. Policy formulation was somewhat slower in developing, largely because of the greater complexity of the general matter of nutrition. The case for some

public initiative in nutrition labeling was developed largely from the recognition of two problems concerning the nutritive properties of food products. The first problem centered around formulated foods which were difficult for consumers to assess nutritionally. The basic nutrition education programs of the past have centered around choosing a nutritious diet by including a variety of foods chosen from four different groupings. Formulated foods such as a frozen pizza may include all of the groups but may be difficult to assess in terms of nutritional values or the relative proportions of the different groups represented.

The other problem pertained to nutritional claims. Since nutrition is inherently a complex topic, it seemed that many claims could pass a deception test (that is, not be ruled deceptive) but could be confusing to consumers. It was felt that a common format in which all nutritional information would be presented was extremely important for enabling the consumer to appraise nutritional claims. As a result of these two issues, nutritional labeling became mandatory only in the cases of fortified foods, where the nutritional properties of basic staples had been altered by additives, and products for which nutritional claims were made in advertising. This was seen as a voluntary policy because the decision to fortify foods or to make claims is a voluntary one.

Time is required to implement a policy of this nature because it must involve complete redesign of all food product labels of the categories made mandatory. Although initial research and policy development began about three years earlier, the program became mandatory in July, 1975. Even if the requirement for nutritional labels is mandatory only for fortified foods and foods about which advertising claims involve nutrition, many food manufacturers are involved in nutritional labeling on all of their products. Many products now in the food system bear the standard nutritional labeling format and the proportion is rapidly increasing.

In view of the present posture in relation to the implementation of a nutritional labeling policy, it is a bit early to assess the eventual consequences. On the other hand some research gives an early indication of consumers' attitudes and reactions to nutritional information on food product labels (Asam & Bucklin, 1973; Beloian, 1973; Boyd, 1973; Briggs, 1973; French & Barksdale, 1974; Grant, 1972; Hegsted, 1973; Klinger, 1974; Lachance, 1973; Lenahan, Thomas, Taylor, Call, & Padberg, 1973; MacDonough, 1974; Meyer & Swanson, 1973; Norman, 1975; Phillips, 1973; Stevens, 1974; Stokes, 1972; Ulrich, 1973; Wedral, 1973; Wells, 1972; White House Conference, 1969; Yankelovich, 1971). The early studies were influenced by the research results obtained from analysis of consumer reaction to unit pricing and open code dating. In view of the general observation that consumers tended to express a positive attitude toward the earlier programs and at the same time tended not to use them very much, some effort was expended to identify any benefits consumers might associate with nutritional labeling, that were unrelated to its direct use in the purchase decision.

NON-USE BENEFITS

Several "non-use benefits" were hypothesized as a potential explanation for the observation that consumers tended to like information programs more than use them. These hypothetical benefits include the potential use of the labels to inspire consumer

confidence in the food industry, to encourage the production of more nutritious foods, to stimulate consumer education concerning nutrition and to satisfy the consumers' right to know. In one sample of consumers questioned about nutritional labeling, less than ten percent found the labeling experiment useful in making a purchase decision while over 30 percent indicated that consumers would benefit from the program even if they didn't read the labels (Lenahan et al., 1972). In a more leading question, about 85 percent of the consumers in the survey indicated agreement with the hypothesized non-use benefits.

Although there have been several studies designed to probe consumer attitudes and responses to nutritional labeling, evidence that consumers' purchase decisions may be altered is extremely scarce and superficial. On the other hand, evidence that consumers like the programs and support them – and are willing to pay for them – is quite abundant. In all of these cases, the implementation of the program seems likely to have some salutary effects on the food market regardless of whether consumers use them in very large numbers. This may be less apparent in unit pricing than the other two programs, but even here the disclosure of unit price information seems to discipline product pricing. In the initial implementation of unit pricing, it was observed that in a few cases “the large economy size” cost more per ounce than the regular size. As long as it was difficult for consumers to appraise differences in relative unit prices, this deceptive policy could persist. But when unit price information was disclosed, the store manager was destined to be embarrassed by this pricing practice even if only one percent of the shoppers observed the unit price differences. Therefore, a small minority may exert a disciplinary influence on prices in the market in general.

The effects on the market which result from the implementation of an information disclosure program relating to open dating and nutritional labeling may be more profound. Where open freshness codes have been provided for consumers, food distributors have developed more efficient procedures for ensuring freshness by more careful product rotation and by withdrawing “out of date” perishable products. A commitment on the part of the distributor leads to better discipline. These benefits are available both to those who read the freshness code and those who ignore them.

Nutritional labeling, similarly, has the potential to influence both the character of products in the market and the information disseminated to the consumer by advertising. On a recent trip through the quality control laboratories of several food processors I was intrigued to observe the great attention being given to nutritional properties of food products in current distribution. Nutritional labeling requires the dissemination of nutritional facts. Once this is done, manufacturers begin to act as if this information may be an element in their competition with other manufacturers. While it may be true that a large percentage of consumers take this information lightly, it is my expectation that the food industry professionals and experts may take it more seriously. If the existing product being offered has notable nutritional deficiencies, I would expect the firm to be motivated towards eliminating such deficiencies.

There are many hazards in drawing inferences from this series of experiences. It is difficult to appraise the necessary time lags for the new set of information to be incorporated into direct consumer purchase patterns. We tend to think of the consumer purchase decision as the result of an analytical process. Yet, the thousands of alternatives and the very repetitive nature of food buying tends to encourage the development of shopping *habits* and rules which replace the instant analysis conven-

tional theory would suggest. How much time is necessary for a new set of information to be incorporated in this pattern of purchase habits?

Another problem is the difficulty of assessing a single influence upon a purchase decision process which involves many determinants. I think the study of purchase patterns in the unit pricing analysis reported by McCullough and Padberg (1971), is probably the most comprehensive effort undertaken. Yet I'm aware of its many limitations. It is also apparent that the measurement problem and the time lag problem confound each other. The most valid comparison would be to relate the consumer choices from a large group of products before and after the information program was adopted. Such a comparison would, however, be non-interpretible because many other influences affect product life cycles. In addition, consumers' answers to survey questions may be affected by the subject under study. It seems apparent to me that many people who indicated that they used these information programs were reflecting a general symptom of program support while continuing in established shopping habits.

It is also possible that information programs are used by consumers to confirm what they may already generally understand. For example, since food is purchased repetitively consumers become aware of the price advantages of house brands and larger sizes, and so the main function of unit pricing may be to confirm this. Shopping patterns may reflect a combination of analysis and habits. Consumers may take the time to study alternatives within a product group every six months or at some irregular period during which informative labels might be useful. In between these irregular analyses, shopping might continue on a habit oriented basis. In such a situation, it would be most difficult to design a research procedure to verify this sporadic use of informative labels.

Despite the obvious hazards, it seems that our experience with labels designed to provide a direct input into the consumer decision process may be summarized as follows. 1) Consumers approve of policy initiative which requires food industry firms to disclose basic facts about food prices, freshness and nutritional properties. 2) There is little evidence that this information has a very large effect on consumers' decision processes or shopping patterns. In many of the tests only a relatively small fraction of consumers were aware of the program and understood its aims. Evidence of any effects on shopping patterns, although admittedly difficult to measure, is extremely scarce. 3) The implementation of a program requiring disclosure of basic information about food products tends to exert a new sensitivity and discipline on the market, largely because of the responses of food manufacturers or distributors. The open disclosure of facts tends to constitute a public commitment on the part of the firm and make it rational for the firm to implement programs to fulfill this commitment.

These observations suggest a basis for a re-examination of program objectives and an attendant reconsideration of the basic theory of consumer behavior.

CONSUMER PROTECTION IN A GALBRAITHIAN WORLD

Although conventional descriptions of a free enterprise economy guided by the market mechanism are dependent upon an informed and aggressive consumer for guidance, the emergence of very large firms and heavy advertising has tended to make

that assumption uncomfortable. Galbraith (1971) hypothesizes a quite different pattern of relationships between the consumer and these large firms. It is argued that these Galbraithian firms tend to preempt the initiatives and leave the consumer more passive and reactive. This is particularly true where the initiatives involved represent the application of science. The technostructure has the capability of combining the varied expertise of many individuals in an experimentation process of a sophistication level well beyond the ability of the consumer. Since elements outside this firm are no longer able to understand or anticipate the applications or initiatives taken by the firm, the market mechanism generally breaks down and is replaced by something called "industrial planning". Industrial planning coordinates the flow of inputs as well as directs outputs into consumer favor and consumption. While the consumer can influence the continued production of known products, he or she is accustomed to waiting passively for the appearance of new products.

This Galbraithian scenario is uncomfortable because it leaves many important questions unanswered. Does the consumer have the option to not choose the new product? Is designed-in obsolescence a major problem? What remedy does the consumer have against designed-in obsolescence? Does the Galbraithian firm influence consumer values as well as their indifference curves? In the U. S. food industry the continuing presence of many small firms, both in the manufacturing and distribution levels, tend to give the overall food industry performance some elements of competitive behavior as well as some elements of the Galbraithian pattern. Private label food products tend to be standardized products with economy images and thereby give some alternative to "new products." Yet the influence of the Galbraithian firm is felt in the food industry and its proliferation of changing products accentuates consumer problems in price comparisons, freshness determinations and nutritional assessment.

In one view we have an expectation of consumer sovereignty resulting from the consumers making informed and analytical decisions and on the other hand we have an expectation of consumer passivity with initiatives grasped by large firms. It is probably impossible to make a definitive distinction between these two consumer roles in the food economy. Consumer motivations are undoubtedly complex and may involve several patterns of incentives and decision criteria. Still, consumers make very little use of informative labels. This must have implications for public incentives to provide them. In assessing the importance and meaning of programs providing informative labels, several informal observations of consumer behavior seem useful.

- 1) The use of informative labels takes time. If one compared the day to day benefits from making informed choice against the cost in time, consumer well-being may be enhanced by ignoring the detailed information provided.
- 2) As income and education rise, time becomes more valuable which may make fussing with the minute details less appealing.
- 3) There is a tendency in the U. S. for consumer concerns to be focused in group activities rather than in purchase behavior. The high income, highly educated consumer has a sensitized concern for "system accountability" and justice in a broad sense. Consumer outrage over rising food prices in a civic and public manifestation may not translate into frugal shopping behavior. Increases in consumer education in general may do more for developing a sense of social justice than it does for stimulating meticulous purchase behavior in one's own interests.

- 4) Womens' liberation has tended to transfer womens' views concerning their personal fulfillment away from household oriented activities and toward activities associated with various groupings outside the household.
- 5) The competitive process within the food industry is an extremely powerful one. In large distribution firms a virtual army of workers are administratively controlled in a competitive struggle with other similar firms. Large food manufacturers not only have the capability of applying science to the process of product experimentation but of spending a vast fortune annually in affecting consumers' views and behavior. This system is capable of and accustomed to taking many initiatives which change the food industry.
- 6) Any policy initiative which sensitizes this system to a new dimension of concern may have a profound effect on the system's output.
- 7) Person to person accountability no longer has meaning in the food industry. We need "automated accountability."

In view of these observations and the experience with informative labels, one could put public policy responsibility in a quite different light. The demands coming from mostly organized consumer groups is not for information to assist the shopping decision but rather for system discipline and public accountability. One could argue that consumers do not want to recover major initiatives but want to be assured that the initiatives transferred to the system are appropriately guided and responsibly carried out. Nutritional labeling provides a useful example. With the complexity of the nutrition subject matter it is extremely difficult to use nutritional information as a meal planning instrument. I have little doubt that efforts in this direction might yield nutritional benefits of a very modest sort and require excessive cost in terms of shopper time. Still, there is probably no other public initiative that would be as effective in translating the public concern for nutritional values into improved food products as the nutritional labeling program.

The disclosure of basic information about product prices, freshness and nutritional characteristics should be seen more as a program of "Societal Sovereignty." Where firms act irresponsibly in any of these dimensions, this information will be readily available to *consumer groups* and through the action of these groups the consumer can find redress. The presence of such information provided through automated processes probably does more than anything else to give industry accountability. In an industry where person to person contact as a medium of accountability is lost, there is a great need for accountability through some other medium. Probably the firms cannot provide that alone without some public initiative. Information to a standardized mandatory format is probably less biased and more trusted than anything firms could do themselves.

One could say that these programs are succeeding but for the wrong reasons. As long as they succeed, how important is it whether for expected or unexpected reasons? From an effectiveness point of view it may not be too important. As long as programs can be supported with a rationale of information to guide the consumer shopping decision, no particular problem exists. On the other hand, policy issues are debated on a criterion of usefulness. The usual analysis is to measure the extent to which consumers take advantage of this information prepared for the purchase decision. It is quite possible within the political process to reject initiatives that might be quite useful to the system, upon discovering a clear lack of consumer use. This is one hazard of

rationalizing labels on the basis of their usefulness in the purchase decision.

It is also possible that we might design the labeling program and its surveillance somewhat differently if our objective was Societal Sovereignty rather than that of providing point-of-purchase information. I'm not sure I can give an example. In most usual cases it seems to me that the type of program most likely to precipitate a response and commitment from Galbraithian firms is one which discloses basic facts in terms consumers can understand.

CONCLUSIONS

Over the past five years, we have accumulated considerable experience with mandatory informative labels in the food industry. Although these programs were promoted as important information inputs into the consumer's purchase decision, consumers have made little use of them. Yet, there is the prospect that disclosure of factual information will have a salutary effect through influencing the actions of professionals within the food industry.

In an industry and in a society where individuals are being replaced by groups as the primary action units, this result is not surprising. Requiring large and complex firms to disclose basic factual information about products is an important way to make these firms publicly responsible. Such information will probably be more useful to consumer groups than to individual consumers. We need to develop a concept of societal sovereignty to replace the outmoded idea of consumer sovereignty.

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