

HOME ECONOMICS

GUIDE



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Consumer Reaction to the UPC*

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Check-out counters using the UPC are equipped with special cash registers that are connected to the store's main computer center.

By this time, consumers are familiar with the small block of light and dark bars called the Universal Product Code that appears on almost every item sold in supermarkets. (See box for further information.) Yet, consumers may question if the code (UPC) will benefit them.

This is not to say that consumers are against the electronic check-out system. The system potentially can offer great advantages: speedier check-out service, improved inventory control, reduced check-out errors, an information cash register tape, and savings passed on because of reduced business costs. However, many of these advantages may not be realized. As examples, the number of check-out lanes available may be reduced, inexperienced or untrained personnel can easily make computer-programming errors, cash register tapes can vary greatly in the amount of information provided while some offer no more information than conventional tapes, and savings may not be passed on to consumers but may be kept as profits.

Still, all these consumer concerns pale before the issue of item pricing.

Item versus Shelf Labeling

Because the central computer decodes the UPC and sends back the price to the digital read-out window at the check-out counter, some retailers feel that individual item pricing is not essential. As an alternative, they have instituted shelf labeling. Consumers generally find this practice unacceptable. The possibility of shelf drift—products not placed near the appropriate shelf price tag—is probable. Price comparisons among different forms of a food (for example, frozen and canned) located in different parts of the store would be difficult. The General Accounting Office, studied 100 stores using shelf labeling and found that 10 to 20 percent of the products were missing labels. And consumers fear that while the price of the item may be changed in the computer, the shelf label may not reflect that change.

Some retailers have suggested that consumers use grease pencils to mark the price on individual items they wish to purchase, and scanners be installed throughout the store to aid in price identification and comparison. Again, consumers are likely to object to such a procedure. Their goal, and one of the goals of the UPC system, is to enable consumers to make their purchases as quickly and efficiently as possible, and not to increase their shopping time.

Consumer Rights

Still, the main reason for rejection of these suggestions is that visible item pricing is a consumer right. The right to information, as stated by former President John F. Kennedy in 1962, is basic and non-negotiable; and **price is a vital component of information.**

Testimony offered to the House Subcommittee on Consumer Protection and Finance by the Consumer Federation of America reiterates why item pricing is vital to consumers: 1) visible pricing contributes to price consciousness and awareness which has a dampening effect on inflation; 2) it is an important instrument of compari-

son shopping; 3) it provides a defense against instantaneous price changes; 4) there is no assurance that the shelf tag will be accurate or that it will correspond to the intended product; 5) it is a tool to verify the accuracy of the prices you pay; and 6) it is easily used by consumers and provides them with readily available information during their shopping trip, at the check-out counter, and when they are budgeting and meal planning.

Industry Objections

Industry has raised some specific objections to item pricing, and consumers need to address themselves to those issues, too. In testimony before a House subcommittee on consumer protection, the Consumer Federation of America, along with its member organizations representing over 30 million consumers, stated that consumers will be willing to accept certain exemptions which seem reasonable. The goal of consumers is not to impose excessive demands but to insure the continuation of information that consumers have and need to maximize purchase decisions.

Industry has also said that item pricing would significantly reduce any savings caused by the electronic check-out system. To the contrary, the Grocery Industry's Ad Hoc Committee on UPC indicates that the potential savings from non-item pricing is only a small percentage of the total savings. An analysis of Giant Foods' study to determine the savings demonstrates that only 23 percent of the potential savings would result from the elimination of price marking. In addition, the analysis by Donald Snyder, a consulting economist with the Public Interest Economics Foundation in Washington, D. C., shows the expected savings per shopper would be only \$1.13 to \$2.27 a year with non-item pricing. From the consumer's standpoint, the question is whether it is worth giving up specific item pricing for that amount of savings. In any event, the more effective competition induced by item pricing might save consumers more than that.

Lastly, industry has hailed the detailed cash register receipt as a substitute for item pricing. This is faulty reasoning. The consumer cannot match the price on the product with the price flashed, and cannot use the tape to comparison shop within the store. The tape is made possible by the electronic equipment; it is not a substitute for item pricing. A buyer needs to have specific and accurate price information to base purchase decisions.

Is consumers' resistance to the UPC merely stubbornness, or a realization that it will decrease their effectiveness in the marketplace? A study conducted for the Ad Hoc Committee of the Grocery Industry for the Development of the UPC bears out the latter. Concerning price recall, shoppers in UPC stores correctly recalled the prices of items in their shopping baskets 56 percent of the time, while shoppers in conventional stores correctly recalled the prices 71 percent of the time.

Over time, the results were even more significant. Over a six-week period, the study found UPC shoppers



As the product is placed on the machine's scanner, a computer identifies the UPC and the price is flashed on the register.

failed to recall the prices of ten items more frequently than conventional store shoppers. Since one of the supposed advantages of the register tape was that it would aid shoppers in price recall and comparison over a period of time, this finding is of particular significance.

The ineffectiveness of the tape is further borne out by the fact that only 5 percent of UPC shoppers used the register tapes at home, compared to 41 percent of conventional store shoppers who used the prices marked on packages in the home as a reference for price comparison.

The Ad Hoc Committee recommended that individual items continue to be price-marked. However, a number of supermarket chains have indicated that they still will experiment with the removal of item pricing.

Federal legislation has been considered which would mandate item and unit pricing. Some state and local governments have already mandated this. But in the end, it may be consumer preference that necessitates item pricing by retailers. For the Ad Hoc Committee study also found that 17 percent more UPC shoppers than conventional shoppers were store switchers.

In summary, it would seem that consumers object not so much to the Universal Product Code, as they do to the elimination of item pricing. If all products were to be individually priced, consumers might be more willing to support and utilize electronic checkout systems.

The May, 1976, issue of "Consumer Research Magazine" gives an excellent answer to the question, "what do the lines and numbers on the UPC symbol mean?"

"They are a code that identifies the manufacturer and the product that is contained in the package. The code consists of a series of bars, called the symbol, and a series of numbers beneath the symbol in which the first five numbers identify the manufacturer and the last the contents of the package and its size or weight. Besides these numbers, there are two additional coded characters. The one at the extreme left of the symbol is called the number system character. It indicates the product category, such as grocery item, or meat, or produce. The one on the extreme right is a character that cannot be identified by the human eye. It is a so-called modulo check character that provides for a fail-safe method of checking the accuracy of the code. Its purpose is to provide a signal if the code marking has been tampered with. The whole UPC label, referred to as a bar code symbol, provides a system of registering purchases by means of an optical scanning device.

"This is how the system works. Each checkout counter at a supermarket that makes use of UPC is equipped with a special cash register that is connected to the store's main computer center. The computer has information stored regarding the current price for each size of each item carried by the store. As the clerk pulls the package across the scanner, the computer identifies it with help of the UPC symbol and searches its fast-acting memory for the price. The price flashes on the register for all to see and at the same time it is printed on the cash register tape along with the identification of the product."*

*Those Strange Looking Parallel Lines and Bars on Grocery Products-What Do They Mean?" *Consumers Research Magazine*, May, 1976, p. 41.



The light and dark bars called the Universal Product Code are found on most supermarket items.

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