ESO-330

FOOD ECONOMICS
Unit Pricing
Open Dating
Item Pricing

March, 1976

by
Lois A. Simonds, Ph. D.
Edgar P. Watkins
Extension Economists

Ohio Cooperative Extension Service and
Department of Agricultural Economics & Rural Sociology
The Ohio State University

March, 1976

FOOD ECONOMICS

There are many issues related to food in retail markets that are being considered by the legislative and executive branches of government at local, state and national levels. Examples of proposed new laws or of changed regulations are:

--Unit pricing
--Open dating of perishable foods
--Required item pricing
--Ingredient labeling on all foods
--Nutrition labeling on all foods
--More stringent requirements for food additives
--Restrictions on non-returnable beverage containers

The Ohio Senate is considering action on a bill which has already been passed by the House. This bill would require unit pricing of all foods, as well as other items, in food retail outlets that have sales of $250,000 or more per year. This would include many stores of convenience store size. The same bill would require open dating on perishable foods with a shelf life of 60 days or less (exceptions are made for fresh meat and fresh produce). Also in the bill is a requirement of mandatory item pricing of all items over 10 cents, if the price is read by computer. This would prohibit the removal of price from individual items in food stores. At the present time, there is no requirement for pricing individual items although most items in food stores are so marked.

These three issues, which are included in the proposed legislation, are discussed on the following pages with a brief summary of issues involved and problem areas encountered by a "legislative solution" related to these topics.

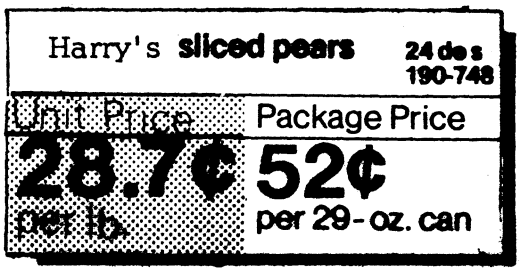
At a later date, we will discuss the present situation about other issues that are primarily concerned with scheduled or proposed regulations by the Food and Drug Administration and other agencies.

Dr. Lois A. Simonds

Edgar P. Watkins

I. UNIT PRICING

Unit pricing (sometimes called dual pricing) proposes that in addition to posting the price per package, can or other retail unit, a price per some quantity such as ounces, pounds, or other unit of measurement also be posted. Many meat, produce and dairy item price lables have carried this information for years. Present proposals call for this kind of pricing information to be extended to most items sold in food stores. One example of this kind of information is shown below and is commonly found on the shelf edge below the item.



Some Arguments for Mandatory Unit Pricing

With the wide array of package sizes and weights in today's stores, price per ounce, per pound or per some other unit of measure would facilitate price comparisons of different sizes of packages or similar brands of products. If this information were available, shoppers could, for example, compare the cost of an ounce (or pound) of product that was in one package containing 6 7/8 ounces with another containing 15 1/2 ounces. If this kind of information was posted, it would be possible for shoppers to more easily make more rational, economic choices between package sizes and different brands.

Some Arguments Against Mandatory Unit Pricing

Three kinds of questions about mandatory unit pricing seem especially significant. First, there is a cost involved in initiating and maintaining such a program in retail stores. Although total industry costs of such a program are only a small part of the total food bill (one study suggests this cost is 0.59 percent of the food bill), there is little evidence that total benefits of unit pricing equal or exceed this figure.

Second, mandatory unit pricing costs discriminate in favor of large retail organizations and against small, one store or independent operations. In an industry where before tax profit margins are between one and two percent of sales these cost differences for the small operator are significantly greater than present profit margins. One study indicates that costs for a food retailer vary from 0.17 percent of sales for a 60 store group of supermarkets (stores with sales of one million dollars or more per year) served out of one distribution center to as much as 4 percent of sales for a one store operation doing less than $150,000 sales per year.

Third, experiences with voluntary unit pricing during the past three years suggest that shoppers have not responded positively when offered this choice. Shoppers have not given evidence that this is important enough to change stores when some stores in their trading area offered unit pricing and others did not. Retailers who offered this service for up to two years are unable to pinpoint any sales gains due to unit pricing--or have shoppers objected when unit pricing is discontinued.

Issues and Problem Areas About Unit Pricing

Unit pricing has potential for being misused by shoppers. Unit price comparisons are most valid when comparing costs per ounce of different sized packages of the same brand. Unit price comparisons are less valid when comparing different brands because of possible quality and taste differences. Such comparisons can be misleading when comparing price of different packs of the same commodity (comparing cost per ounce of frozen, whole kernel, liquid packed, and vacuum packed corn, for example). Such experiences have led shoppers to report that when they put much emphasis on unit pricing, they were pushed directions they didn't care to go--that of choosing lower quality products.

Part of this problem of comparing different types of pack could be resolved by making a "drained weight" comparison rather than total net packaged weight. At the present time, this information is not available.

Additionally, a small percentage of customers have made use of this kind of information when offered. Perhaps additional educational activity about unit pricing would improve this percentage.

There may be additional costs and market inefficiencies that develop in situations where individual localities and states make unit pricing mandatory and provide for differing specifications for labels to carry this information. Because of this situation, one distributor may have to provide several different labels in their marketing area which commonly crosses one or more market areas and state lines.

Many shelf labels carrying this information have been criticized because the information provided was not readily perceived by customers. The adoption of a national, uniform, easily read unit pricing label seems to be a prerequisite to wider acceptance of the unit pricing concept and its use.

Cost discrimination seems to suggest that food stores smaller than supermarkets (defined as stores with annual sales of $1 million per year) should be exempt from mandatory unit pricing. These smaller stores account for about 25 percent of retail food store sales.

II. OPEN DATING

Most processed food products at the present time carry coded information about date and place of pack. This code originates with the processor and may be identified in published code books available to the food trade and other interested parties.

Open dating proposals suggest that an open date be used on all perishable and semi-perishable food package labels. The Ohio legislation identifies food products which should carry an open date as those with a shelf life of 60 days or less (fresh meat and fresh produce are exempt). The open date label requirement would apply to many bakery products, processed meats, eggs, cheese and other dairy products, and some additional processed items.

Some Arguments for Open Dating on Perishable Foods

Freshness of food products is a highly held value of most food shoppers. This is especially true of perishable and semi-perishable food. Some foods have a shelf life of only a few days before they lose color, taste, and nutritive value. Shopper knowledge of the relative freshness of these products is important if they are to avoid purchasing stale, spoiled or deteriorating food. In recent studies some 5 percent of supermarket perishable products were still on the shelf after the prescribed pull date. Open dating observed both by store employees and by customers would improve inventory rotation procedures and shoppers would benefit from improved performance at the store level.

Some Arguments Against Open Dating of Perishable Foods

There are four specific arguments against the concept of open dating of perishable food products. There is confusion about what "open dates" mean, both on the part of shoppers in retail stores and in the food trade. An open date

may be the date the product is packed, or a date the product is to be removed from the store shelf or an expiration date after which the product should not be used.

A "packed date" is most useful to the processor for identifying when the product was produced. A "pull date" is probably the most useful date to retailers and their employees as identifying when this product should be pulled from the shelf. An "expiration date" is probably most useful to consumers as it identifies the time when some loss of a quality aspect of the food product takes place. Examples of all three of these "open dates" can be observed in most food stores. Unfortunately, on many products the date does not carry additional information stating what the date means. Even store employees of large supermarkets are often not aware of what the date on the carton or label really means.

Issues and Problem Areas About Open Dating

There is a need for several kinds of open dates on food products to meet the requirements of food processors and retailers to provide useful information to better serve customers and to customers of food stores as they make decisions about which food products to buy.

There is also a need for uniformity across trading areas and state lines, both for more effective, readily understood label information and for increasing knowledge of and usefulness of such information by the food trade and by consumers.

One possible solution would require appropriate revisions to the Model State Open Dating Regulations adopted by the National Conference on Weights and Measures. Any prior local and state regulations might well be advised to carry provisions for automatic adjustments to possible adoption of the Model State Open Dating Regulations, and subsequent changes in this proposal.

Each food commodity, and to a lesser extent many food products, have their own time clock determining what the effective "shelf life" is. A simple and potentially valuable concept such as open dating becomes a very complex mixture when applied to thousands of food products under varying conditions of storage, sales and home use.

Perhaps, if an open date is used, it should be further qualified to identify what the date means, such as date packed, do not sell after this date, or do not use after this date. Perhaps a compromise open date such as found on some processed meat packages would meet the needs of both the food trade and consumers. This compromise could read, "For best quality, this product should be used within seven days after June 15, 1976 when stored at 40^{o} F."

III. REQUIRED ITEM PRICE MARKING

For many years (since supermarkets became popular), food stores have routinely price marked individual items for sale. This practice was less common when food stores were small sized service stores where clerks took orders and tallied prices.

Now, another major change in retail food stores is underway. The effects of this change have many implications for both the food trade and its customers. Food retailers have recognized for many years that better inventory control, fewer pricing errors, better ordering procedures, and more accurate forecasting of product movement under different conditions were possible if the capability of the computer could be put to work in pricing, monitoring individual item movement in each retail store, and other repetitious and detailed tasks.

With the adoption of the Universal Product Code (UPC), an example of which is illustrated below, and the development of scanners coupled to electronic cash registers and computers, the automation of many of these time consuming and repetitious jobs became possible. Today, there are tests of systems using varying amounts of this machine capability in some 100 stores across the country.

Briefly and oversimplified, each product in food stores would carry the UPC code illustrated above. Today about 60 percent of the food store products carry this code. This UPC symbol identifies the food manufacturer, processor or retailer responsible for this product and the food product itself. When this symbol is passed over a scanner at checkout, the scanning device "reads" the UPC symbol, relays the product identification to a small in-store computer, asking the computer the price. The computer, in turn, "reads" its memory bank

and flashes the current price to the electronic cash register which automatically rings up the price and identifies the item on a tape printout. Automatic calculation of sales tax, coupon redemption, check cashing and other information is also identified on the register tape. The system also has the capability in the future of automatic transfer of funds from your bank account to the store's bank account with the use of a "cash" card.

```
  HOMETOWN FOOD MART
STORE 123   04/20/7-


GRO    .54F CEREAL
NFD   3.90H WINSTON
GRO    .57F CHILI
MT    1.13F T BONE
NFD    .43C KLEENEX
PRO    .47F BANANA
NFD    .19C DOG FOOD
NFD    .35C GLAD WRAP
GRO    .07F KOOL AID
GRO    .07F KOOL AID
GRO    .06F KOOL AID

        .06  TAX

       7.84  TOTAL

      10.00  CASH

       2.16  CHANGE

0007 02  4  4.22PM
```

If the total capability of this system is used, recent information from test situations indicates a total savings of about 2 percent of store sales. This is a fairly significant figure as before tax profit levels for most retail food organizations is less than 2 percent. A savings of this magnitude would pay for the investment required to install the new cash registers and computer. The major areas of savings in fully utilizing this system according to some test results are:

(1) Immediate savings of not having to price mark individual items, 23 percent of total savings

(2) Front end savings resulting in time for new management skills (faster, more accurate checkout), 42 percent of total savings

(3) Eventual savings from better inventory control, more efficient operating procedures, 35 percent of total savings

(4) More accurate, timely information.

At this point, consumer and labor groups have objected to the suggestion that individual item price marking be eliminated, even if possible savings could amount to as much as 23 percent of 2 percent or almost one-half of one percent of the food bill, a part of which competition would pass on to the food store customer. Part would be required to pay for the new equipment needed.

Some Arguments for Required Item Price Marking

Even though complete adoption of the electronic checkout system might remove individually priced items, the proposal calls for prices to be posted on the shelves adjacent to the product. In addition, the item and price would be printed on the customer's register tape.

Consumer groups have stated that shelf prices now and in the past have not been well maintained or accurate and at times are not located adjacent to the product. The food industry acknowledges some shortcomings in this area in the past and promises better performance in the future.

Other consumer groups have expressed the opinion that computer-based prices could be manipulated and could be different from posted shelf prices. Industry spokesmen state the system has safeguards to prevent this. However, a trained and knowledgeable person at the right place could probably perform some computer-based price manipulation. Perhaps there is need here for legislation making this kind of manipulation illegal with associated penalties. This kind of price manipulation would likely come about not because of company policy but because of company pressure on employees for better performance.

Still other spokesmen for labor groups and consumers have pointed out that most shoppers compare prices by noting the price stamped on a previous purchase and the price stamped on a current purchase, rather than by using

information contained on a register tape, and therefore visible prices on packages are a basic and non-negotiable right of consumers.

Some Arguments Against Required Item Price Marking

The most persuasive argument for removal of visible individual price markings on items is the cost of price marking each item. The food trade argues that the loss of this potential savings will slow the adoption of the electronic front end and the savings associated with that automation and other store operations. Consumer spokesmen state they will accept 75 percent of the total savings possible while keeping individual items price marked.

Beyond this immediate concern about store operations are questions about the wisdom of prohibiting by law parts of a system that customers have not been exposed to. All retail operations where the automated front end is being used are still test operations--there are none which are fully operational. There have been relatively few objections from customers who have regularly shopped a test store where prices have been removed from individual items.

This subject is also illustrative of an area where competition is likely to operate very well. Unlike an issue such as open dating, the decision whether or not to item price is usually determined by the retailer rather than by his suppliers. In this situation, it would take only one retailer in a trading area with effective publicity that prices would not be removed and customers responding to this strategy to force all major retailers in the area to adopt the same strategy.

Issues & Problem Areas Associated with Required Item Pricing

There is merit in the industry's argument that the electronic checkout system be allowed time for a fair trial by most consumers. If problems for customers do develop, at that time some solution by regulation or new laws may be appropriate. Further future problems related to the electronic checkout may turn out to be entirely different from those now envisioned.

For years the food industry was accused of automatically opposing any suggestions from consumer groups for change. In this case, perhaps consumer groups are overreacting to proposed change before the idea is fully developed or given a reasonable trial period.