A Value-Based Meat Marketing Program

J.W. SAVELL[1*], J.P. WALTER[1], R.P. GARRETT[2], C.L. LORENZEN[1], D.B. GRIFFIN[1], T.R. DOCKERTY[3] and H.K. JOHNSON[3]

INTRODUCTION

One of the major thrusts of the U.S. livestock and meat industries in the late 1980's and early 1990's has been the area of value-based marketing. Value-based marketing is buying and selling livestock, carcasses, wholesale and retail cuts on individual merit rather than as groups where the superior nature of some are masked by the inferior nature of others. Those in the industry who favor value-based marketing feel that they can reap the rewards of better pricing of livestock and meat; however, those against this system tend to prefer buying and selling "on the average" because average prices can be received for products that are below average in value.

Reviews of value-based marketing are reported by Savell and Cross (1991) and Savell et al. (1993). These reports deal with the broad area of value-based marketing, especially those related to the eight consensus points outlined by the Value-Based Marketing Task Force (1990), an industry group charged with developing a plan to implement value-based marketing before the year 2000. The first two consensus points addressed the specific topic of this paper — for value-based marketing to be most effective, the interface between the retail and packer segments must be addressed before the remaining interfaces between segments can be improved.

These two consensus points were as follows: (1) Communicating value to the retail industry is critical to reducing waste fat production, and (2) Closely-trimmed boxed beef should be an option in the marketplace. Both of these consensus points emphasize that before the early 1990s, boxed beef could contain up to 2.5 cm of external fat and still be within the industry specifications. Retail beef, however, has been closely-trimmed (approximately .3 cm of external fat) since the last 1980's (Savell et al., 1991). This great difference between the amount of fat that was bought compared to what was sold generated substantial amounts of waste fat at the retail level. This seemed like an easy problem to solve: just offer closer-trimmed beef subprimals to the retailer and leave the fat behind at the packer level. This solution also would help send stronger marketing signals. Animals that produce too much fat should be penalized when purchased by the packer because the consequences for fat purchased versus fat sold clearly would rest in the packer segment of the industry. Unfortunately, as with most problems associated with value-based marketing, this conclusion was not that easy. First, retailers were ill-equipped to understand the value of closer-trimmed product. As expected, products that once had up to 2.5 cm of fat would be priced higher when now sold at 1.3 or .6 cm levels. The questions that arose from this discussion were these: (1) How much higher should these products be priced? (2) Are there yield improvements and labor savings at the retail level if substantial amounts of fat are removed? (3) Will this product be available from enough packers to allow direct price comparisons in the marketplace? Without good answers from these and other questions regarding closer-trimmed boxed beef, the product would not be produced by packers. Clearly, this dilemma had to be addressed.

The solution to this problem came in the form of the Beef CARDS software program (Garrett et al., 1991; Walter et al., 1991). CARDS is the acronym for Computer-Assisted Retail Decision Support. A brief discussion of the background of the program and a description of the key components of the software package follow.

BEEF CARDS

In an effort to answer the questions related to the pricing of closely-trimmed subprimals, a simulated retail meat cutting backroom was constructed in the Rosenthal Meat Science and Technology Center at Texas A&M University. The backroom was fitted with cutting tables, power saws, scales, racks, and wrapping and pricing equipment. Meat cutting instructors from the Texas State Technical College served as the skilled labor resources for determining both

*[1]Department of Animal Science, Texas A&M University, College Station, TX.

[2]PM Beef Group, 100 Arbor Oak Drive, Ashland, VA.

[3]National Live Stock and Meat Board, 444 North Michigan Avenue, Chicago, IL.

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retail yields and time requirements to convert subprimals of different purchase specifications (i.e., USDA yield and quality grade, external fat trim levels) into retail cuts of various endpoints under controlled circumstances.

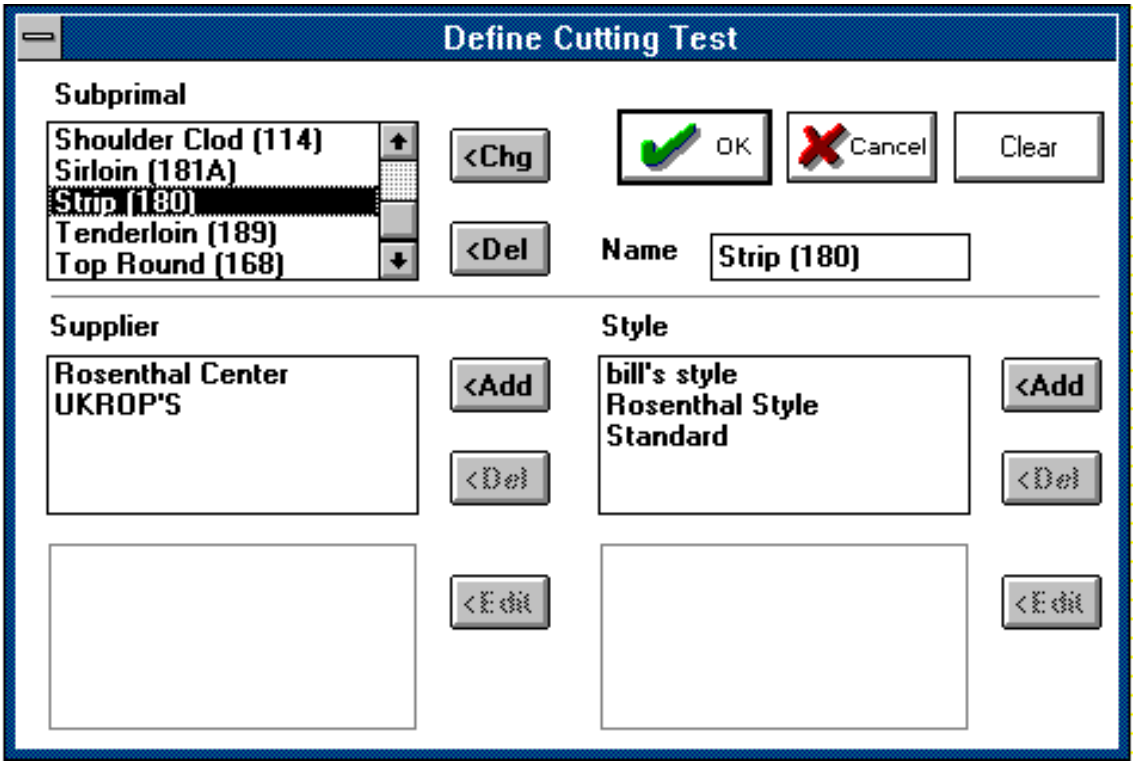
Information from these cutting tests was analyzed and regression equations were incorporated into a Microsoft Excel® spreadsheet macro. This first-generation software package was distributed to retailers beginning in 1991 (Garrett et al., 1991; Walter et al., 1991). Because of the feedback and suggestions received from end-users of Beef CARDS, a new version was developed that would run under the Microsoft Windows platform. Beef CARDS for Windows® was released in 1993. This more powerful version has been distributed widely to retailers and other entities where calculating cutting yields and times may be important.

Sections and figures representing principal elements of the software package follow. The software package has sufficient utility to allow the incorporation of existing cutting tests into the library for additional evaluation by the retailer.

Figure 1. Opening the File Menu.

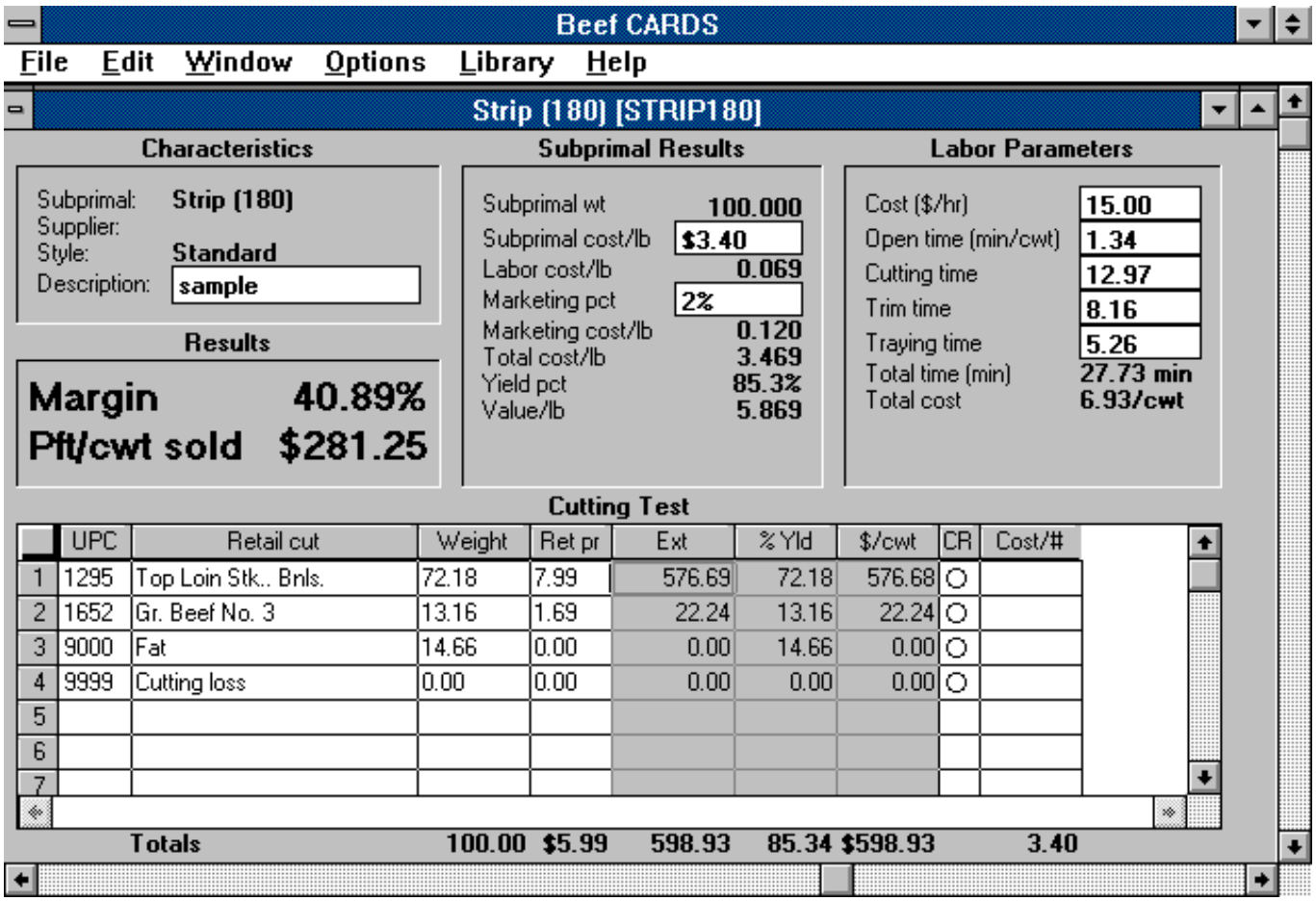
This figure shows the "File" menu. Under the "File" menu, the user has several options available. "New subprimal..." or "Open..." allows the selection of a new cutting form or the opening of an existing cutting form. "Save" and "Save As..." have the traditional software program meanings. The next section deals with importing or exporting cutting tests. This allows the incorporation of existing cutting tests or the export of information into other data analysis systems.

Figure 2. Define Cutting Test.



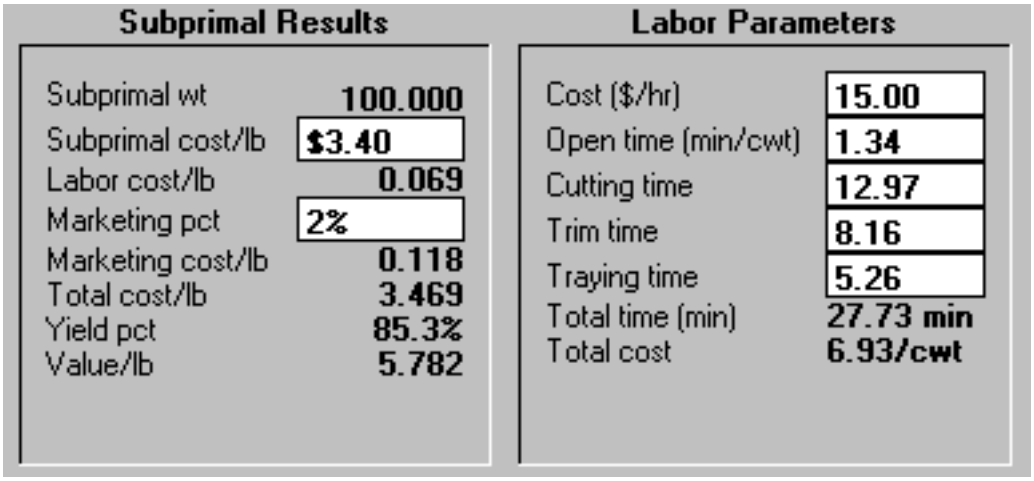
This is the window that comes up when "New Subprimal..." is selected under the "File" menu. This section allows for the selection of subprimals to be evaluated with the option to add or delete specific subprimals. Supplier and style information can be added to allow for the accumulation of additional information for future use.

Figure 3. Data Sheet.



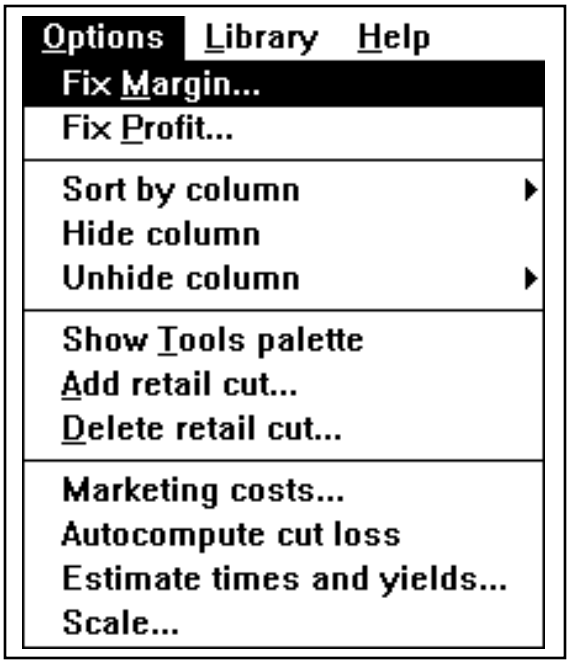
Presented here is the window that comes up on the screen after the information in the "New Subprimal..." box has been completed. It has sections that describe purchasing characteristics, subprimal results, labor parameters, cutting tests, and results that are reported in gross margin and in profit per hundredweight (45.3 kg) sold. To help better explain the information that is used here, individual components of this page as well as specific menu items are discussed below.

Figure 4. Subprimal Results and Labor Parameters.



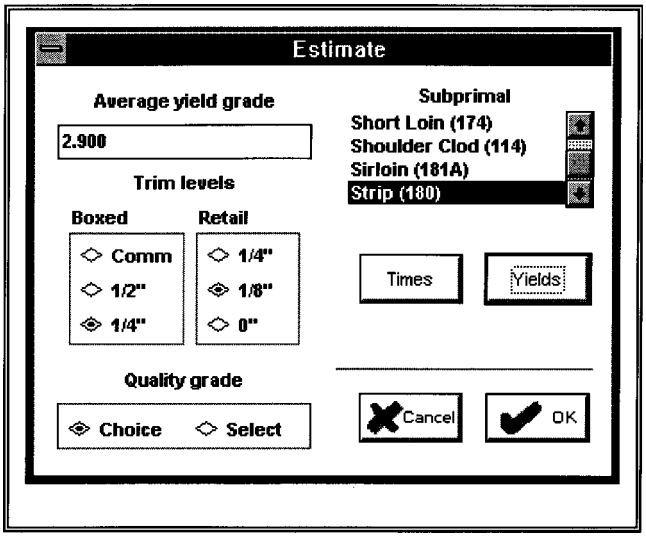
This section of the window is where subprimal and marketing costs are entered and where labor costs are calculated. For labor costs, the retailer enters the cost as an hourly rate. The times can be entered by the retailer based on cutting tests or can be calculated based on the regression equations contained within the Beef CARDS program.

Figure 5. "Options" Menu.



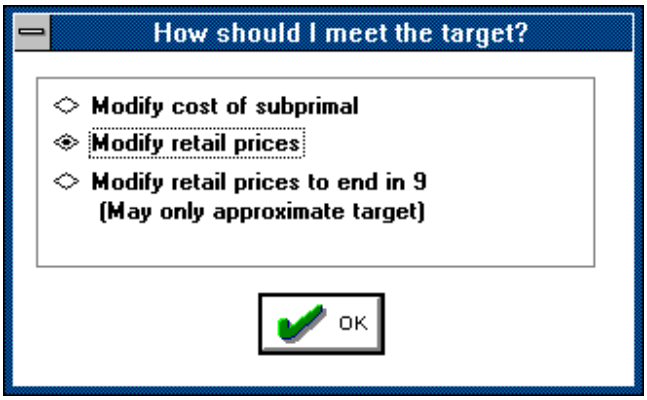
This menu is where margins and profits can be set and the program can adjust specific prices to reflect the wishes of the retailer. Retail cuts can be added or deleted from the cutting sheet, marketing costs can be adjusted, and weights can be scaled up or down to predict actual yields based on quantities purchased. A unique feature of this menu is the "Estimate times and yields..." window (Figure 6).

Figure 6. Estimate Times and Yields.



This figure allows the user to select the USDA quality grade and the average USDA yield grade of the product mix they are purchasing, the trim levels of the boxed and retail product, and the use of the built-in regression equations for estimating times and yields.

Figure 7. How Should I Meet the Target?



For the "Fix Margin..." and "Fix Profit..." windows, after the target number has been entered, a new window (Figure 7) comes up. This window is titled, "How should I meet the target?" and gives the user three different options of modifying prices to achieve this target. By modifying the cost of the subprimal, retail cut prices, or retail cut prices to end in a 9, retailers can evaluate various scenarios to achieve their goals.

The spreadsheet that is used to show the results of the cutting tests is shown in Figure 8 on the following page. Columns are used to report the U.P.C. (Universal Product Codes) numbers, retail cut name, weight, retail price, extension (weight multiplied by price), yield, dollars per hundred pounds (45.3 kg), and a radio button to signify if the retail product was purchased as a case-ready item. The information that is on this form is either directly entered by the user or is generated from the regression equations when that option is chosen.

The results box (Figure 9) shows the gross margin percent and profit per hundred pounds (45.3 kg) sold. As information in the other portions of the large window is altered, the results box reflects the impact of these changes. Users have the ability to play "what if" games to see how purchasing and merchandising decisions impact potential profitability.

Figure 9. Results Box.

Figure 8. Cutting Test Spreadsheet.

Cutting Test

	UPC	Retail cut	Weight	Ret pr	Ext	% Yld	$/cwt	CR	Cost/#
1	1295	Top Loin Stk.. Bnls.	77.36	7.40	572.86	77.36	572.86	○	
2	1652	Gr. Beef No. 3	10.33	1.57	16.18	10.33	16.18	○	
3	9000	Fat	12.31	0.00	0.00	12.31	0.00	○	
4	9999	Cutting loss	0.00	0.00	0.00	0.00	0.00	○	
5									
6									
7									
		Totals	100.00	$5.89	589.04	87.69	$589.03		3.40

PORK AND LAMB CARDS

With the success of the Beef CARDS program, research was conducted to develop similar programs for pork and lamb (Lorenzen et al., 1995). Pork CARDS is more tailored to addressing merchandising options because greater differences exist in how products are sold than in purchasing options. Lamb CARDS places equal emphasis on the purchasing and merchandising aspects of the program. Lamb can be purchased as whole carcasses, three-piece boxed variety, and as boxed primals. These purchasing options directly affect the type and quantity of products generated and the amount of labor required to transform these wholesale options into retail products.

BENEFITS TO THE INDUSTRY

The trend that is happening today in the retail sector of the meat industry is toward greater attention to cost factors and pricing schemes. Although the "cents per pound" form of pricing is not a new concept, the Meat Science Section of the National Live Stock and Meat Board has worked with several retailers on this form. This concept is that pricing should reflect a given amount of profit per unit sold, not as a percentage of wholesale price (gross margin). Gross margin is influenced by the cost of the raw materials with higher-priced subprimals causing even higher retail prices and the fact that as wholesale prices fluctuate, retail prices may fluctuate more widely. The initial success of these trials has led the Meat Board to developing individualized programs and workshops for retailers to see what this program can do for their businesses.

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