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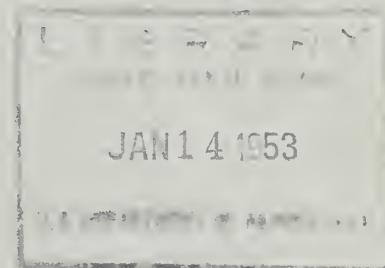


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## BETTER UTILIZATION OF SELLING SPACE IN FOOD STORES. Ba on

### Part I. Relation of Size of Shelf Display to Sales of Canned Fruits and Vegetables



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UNITED STATES DEPARTMENT OF AGRICULTURE  
PRODUCTION AND MARKETING ADMINISTRATION

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BETTER UTILIZATION OF SELLING SPACE IN FOOD STORES .

Part I. RELATION OF SIZE OF SHELF DISPLAY TO SALES  
OF CANNED FRUITS AND VEGETABLES

*3a 2*  
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SUMMARY

Fewer rows of display per item and more items stocked would likely increase the gross profit of retail food stores. This was the conclusion drawn from an experiment in 5 supermarkets located in an eastern metropolitan area. The experiment included 17 representative canned fruits and vegetables.

Effective utilization of the selling space in retail food stores helps reduce the cost of retailing. Lower retail costs are of immediate help to the retailer and, in the long run, reductions in marketing costs help producers and consumers.

The average sales and gross margin per unit of display space (row or shelf foot) with a 2-row display exceeded by nearly 5 to 1 the additional sales or gross margin per added row of display. Sales of the 17 selected canned fruits and vegetables showed an increase of 10 percent of sales for each row added to a display consisting of 2 or more rows. Total weekly sales of these items in the 5 supermarkets averaged 590 cans when 2-row displays were made. Sales increased an average of 60.9 cans per row added, up to 6 rows, the limit of the experiment. Likewise, sales decreased an average of 10 percent as the size of display was decreased from 6 to 2 rows.

Gross margin per shelf foot for the first two rows was at an average rate of \$1.34 whereas for each additional row it was at the average rate of \$0.29. With the 2-row display weekly gross margins per linear shelf foot for the individual items ranged from \$0.47 to \$4.40. Returns per linear shelf foot for every additional row displayed ranged from a minus \$0.16 to a plus \$0.99.

1/ Acknowledgement is made to V. L. Browner, President of the National Association of Retail Grocers of the United States, and John H. Wells, grocery supervisor of the stores in which the study was made, for assisting in planning and developing the study and in analyzing the data contained in this report. This study was conducted under the authority of the Agricultural Marketing Act of 1946 (RMA, Title II).

The fact that the average sales and gross margin per unit of display space (row or foot) with the 2-row display greatly exceeds the additional sales or gross margin per added unit of display emphasizes the importance of considering the addition of new items to the shelf before increasing beyond two rows the display space of all except fast-moving items.

Estimates of the effects of applying these conclusions to present canned fruit and vegetable displays in 2 typical supermarkets show that worth-while economies might be made. If the proposed displays were used instead of the present displays in one of these supermarkets, it is estimated that 36 percent of the shelf space (currently yielding not more than 46 cents gross margin per shelf foot) now used for the items studied would be made available for other items. Gross margin per shelf foot could be increased from \$1.76 to an estimated \$2.50. In the second supermarket if the proposed displays were to replace the current display, an estimated 43 percent of the shelf space (currently yielding not more than 56 cents gross margin per shelf foot) would be made available for other items. Gross margin per shelf foot in this supermarket could be increased from \$1.68 to an estimated \$2.51.

Although individual item sales increased or decreased as rows were added or dropped, the sales of all canned fruits and vegetables probably changed considerably less since there probably was substitution by the customer of one item for another.

#### INTRODUCTION

Effective utilization of selling space aids in lowering the cost of distributing food through retail stores. Low retailing costs are of immediate help to retailers and, in the long run, they increase producers' incomes and tend to hold down retail prices to consumers. Retailers are always confronted with the problem of obtaining the maximum returns from their displays of food; moreover, with the continued trend toward one-stop shopping centers, a pressure for space for other items is ever present.

Considerable difference of opinion and of practice exists among food retailers regarding the quantity of grocery items that should be displayed. If the quantities displayed are too small, frequent restocking is required, and there is a possibility of loss of sales because the customers overlook the displays or the shelf is empty. On the other hand, if larger than necessary displays are used, valuable shelf space is occupied that may be more profitably used by other items. Table 1 shows practices for the display of certain kinds of canned vegetables in 22 supermarkets of a local chain organization. Observation indicated that the lack of uniformity in the displays of canned fruits and vegetables was fairly typical of displays of other grocery items.

Table 1.--Number of rows of cans in the displays of selected canned vegetables on shelves in 22 supermarkets, eastern metropolitan area, 1951

Kind of canned vegetable	Cans displayed in--				
	:2 rows:3 rows:4 rows:5 rows:6 rows or more				
	Number	Number	Number	Number	Number
:					
Cut asparagus	: 5	7	5	2	3
Mixed vegetables	: 4	13	2	2	1
Peas and carrots	: 5	9	7	1	0
Diced beets	: 12	8	2	0	0
Diced carrots	: 17	3	2	0	0
Boiled onions	: 7	10	2	2	1
Spinach	: 4	11	5	2	0
Irish potatoes	: 3	9	6	3	1
Sweetpotatces	: 3	13	4	1	1
Whole k. w. corn	: 5	11	4	2	0
Cream style corn (brand A)	: 5	11	4	2	0
Cream style corn (brand B)	: 3	9	7	3	0
Whole k.g. corn (brand A)	: 4	10	5	1	2
Whole k.g. corn (brand B)	: 9	10	1	1	1
Cut wax beans	: 5	12	4	1	0
French green beans	: 1	7	10	2	2
Cut green beans	: 4	10	6	1	1
Green limas	: 5	8	5	4	0
Fordhook limas	: 5	9	7	0	1
Peas (brand A)	: 1	4	8	7	2
Peas (brand B)	: 2	9	5	3	3
Peas (brand C)	: 2	1	7	1	11
:					

Some of the variability in displays is due to size of store and type of customers, but in this study most of the stores were substantially the same size and the variation appeared to result largely from the opinions of individual managers. Principal reasons given by store managers for their display procedures were: (1) Large shelf displays sold more merchandise than small shelf displays; and (2) shelves were stocked in relation to the sales of the items in order to minimize the frequency of restocking. Practically none of the display practices was based on factual analysis of sales.

The objective of this study was to determine, for each of a selected number of canned fruit and vegetable items, the effect the number of rows of cans displayed on the store shelf had on the quantity sold. Since the effect may be different for impulse or demand items, large or small cans, and fruits or vegetables, all these factors were included in the experimental study.

The study was designed to compare the sales of 17 selected canned fruit and vegetable items from displays of 2-, 3-, 4-, 5- and 6-shelf rows. A shelf row display is one can wide, 3, 4, or 5 cans high (between shelves), and 5 or 6 cans deep (depending on depth of shelves and size of cans). The study was conducted as a controlled experiment in five representative stores of a local supermarket chain organization. The experiment covered five consecutive 5-week test periods for each store. The number of rows of display cans of each item was changed at the beginning of each 5-week test period. Each item received all five of the different row treatments during a 5-week test period in each store. For example, item A was rotated through the five stores (table 2).

Table 2.--Number of rows of cans of item A displayed during five 5-week test periods in the five test stores, 1951

Store	Row of cans displayed during period No.--				
	1	2	3	4	5
	Number	Number	Number	Number	Number
I	3	6	2	4	5
II	6	4	5	2	3
III	4	5	3	6	2
IV	2	3	6	5	4
V	5	2	4	3	6
:	:	:	:	:	:

The order in which each row treatment fell was selected at random. Differences that may have been due to store management, personnel, and location, were largely eliminated by the method of testing used. Uniform displays, prices, shelf location, and brands were maintained for all the canned fruits and vegetables. The number of cans of each commodity sold in each 5-week test period was obtained from each store.

#### RESULTS OF CONTROLLED EXPERIMENT

Average sales per row from the 2-row display were about 5 times greater than were sales when more rows were added. Thus, the major part of the sales was obtained from the first 2 rows displayed. Sales of 17 selected canned fruits and vegetables showed an average change of 10.3 percent <sup>2/</sup> for each row added or taken away from the item display (table 3). Total weekly sales of these items in 5 supermarkets averaged 590 cans when 2-row displays were made. Sales increased an average of 60.9 cans per row added, up to 6 rows, the limit of the experiment (fig. 1).

<sup>2/</sup> For comparative purposes percentage changes in sales are expressed on the basis of the sales obtained with a display of 2 rows.

Table 3.--Relationship between display rows of cans and weekly sales per store, of 17 selected canned fruit and vegetable items in 5 supermarkets, eastern metropolitan area, 1951

Item and brand	Can Size	Cans sold weekly from display of-			Average differences in sales due to change in display rows		
		Ounces	Number	Number	Number	Number	Percent 3/
N B 1/ Peas	: 17 :	47.6	51.6	58.2	67.6	78.2 :	7.65
P B 2/ Cut green beans	: 17 :	26.8	36.0	31.8	35.8	46.4 :	4.90
P B Cream style golden corn	: 17 :	43.0	35.4	37.2	30.8	34.8 :	- 2.05
P B Peas and Carrots	: 17 :	12.8	12.0	12.8	17.2	21.0 :	2.05
N B Boiled onions	: 16 :	8.2	10.2	11.2	14.6	11.4 :	.80
N B Fordhook limas	: 17 :	12.4	8.4	13.0	13.8	13.4 :	.25
N B Peas	: 8 :	94.4	107.4	108.6	129.4	153.2 :	2.0
P B Cream style golden corn	:: 8 :	23.8	22.4	27.8	35.4	39.2 :	15.6
N B Boiled onions	:: 8 :	24.6	29.6	25.0	24.6	28.8 :	3.85
N B Fordhook limas	:: 8 :	24.2	20.8	19.0	31.6	25.6 :	4.3
N B Applesauce	:: 17 :	107.4	127.2	123.4	153.0	155.4 :	1.4
N B Fruit cocktail	:: 17 :	24.2	28.0	33.6	38.6	36.8 :	11.2
N B Crushed pineapple	:: 20 :	13.6	15.6	15.6	17.2	15.2 :	3.15
N B Applesauce	:: 8 :	53.8	78.8	64.8	68.8	75.8 :	2.9
N B Fruit cocktail	:: 8 :	41.4	37.6	47.8	57.4	57.2 :	10.2
P B Royal Ann cherries	:: 8 :	11.0	9.4	9.0	14.0	15.6 :	9.5
N B Crushed pineapple	:: 8 :	20.8	23.8	26.2	27.0	25.6 :	10.4
Total or average	:	590.0	654.2	665.0	776.8	833.6 :	5.8
						60.90	10.3

1/ N B means National branded merchandise.

2/ P B means Packer branded merchandise.

3/ Percent of sales with sales from 2-row display as base.

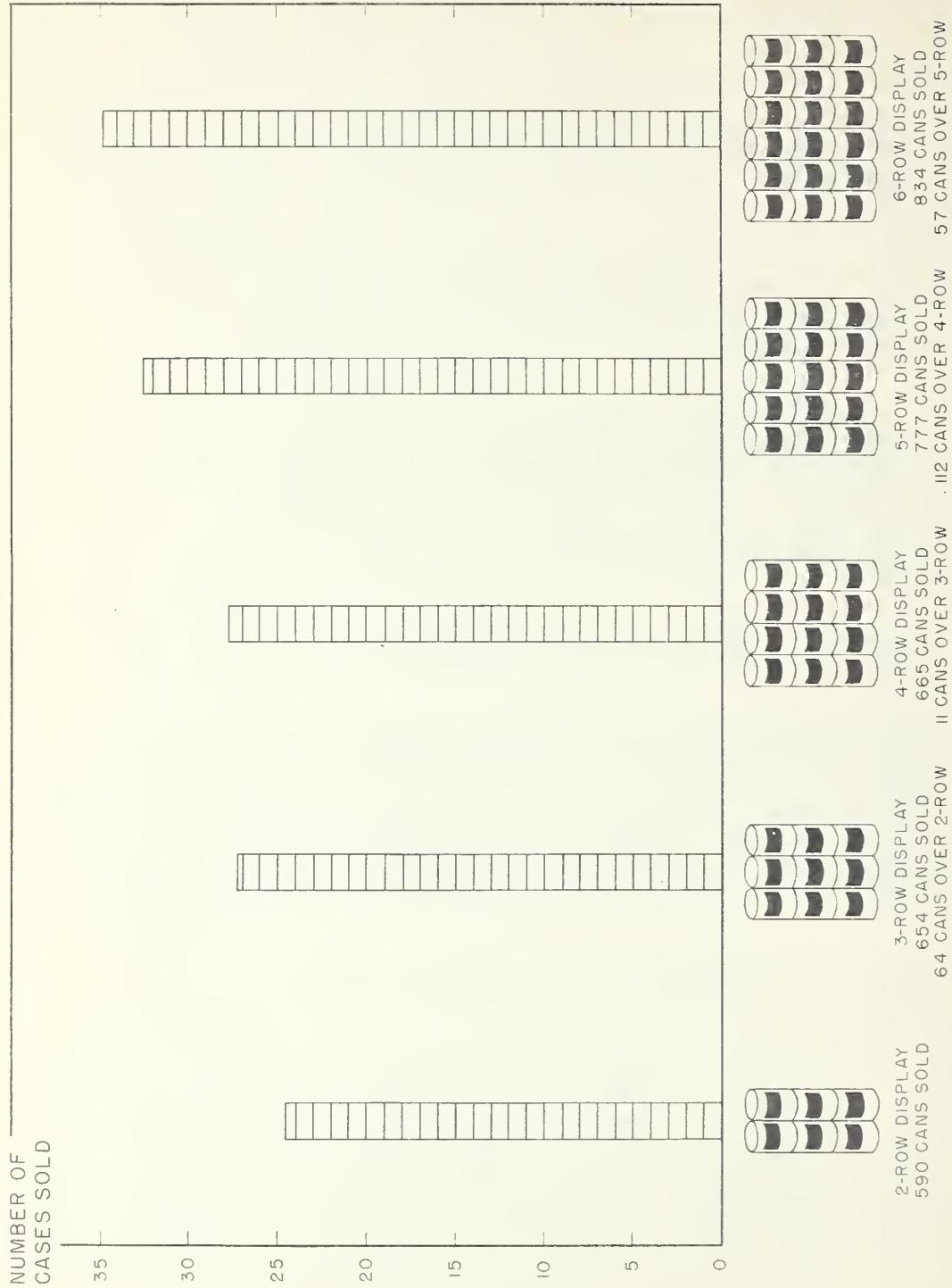


Figure 1.--Relationship of rows displayed to weekly sales per store of 17 selected canned fruit and vegetable items in 5 supermarkets.

The average increase per added display row (successive increases from 2 to 6 rows) varied among the commodities, ranging from a minus 4.8 percent to a high of 18.3 percent of the total sales for the 2-row display. Although some of this variation may be due to chance differences in sales in the stores studied, some of it is undoubtedly due to the nature of the commodity studied. When several brands of the same item, such as peas or green beans, are stocked, an increase or decrease in the display rows of one brand could be expected to affect its sales somewhat more than when only one or two brands of an item, such as lima beans or crushed pineapple, were displayed. Greater opportunity for substitution is offered when several brands are displayed. However, the indicated change in sales of single brand items, such as lima beans, onions, or crushed pineapple, probably would not reflect net sales gain or loss to the store since substitution may take place among items as well as among brands of the same item. Data were not obtained on sales of all canned fruits and vegetables but there was reason to believe that the total canned fruit and vegetable sales would have changed considerably less than did individual item sales.

Items which moved in small volume appeared to respond to changes in the number of rows displayed at a slightly slower rate than did the large-volume items (table 4). The average rate of change for the small-volume items (less than 20 cans weekly) was 8.1 percent. For the large volume items (over 40 cans weekly) the corresponding rate of change was 12.7 percent. The difference between the two rates of change may be due principally to chance, especially since the rate of change of the middle group (20 to 39 cans weekly) was below the small-volume group. There is an indication in the small-volume items of a leveling off of the rate of change since the sales for both the 5- and 6-row displays were the same. However, this may be due to chance.

Table 4.--Relationship between weekly sales by display rows of cans and volume of the canned commodities sold in 5 supermarkets, eastern metropolitan area, 1951

Average sales per week	Cans sold weekly from displays of:						Average change per row
	:2 rows:	:3 rows:	:4 rows:	:5 rows:	:6 rows:		
	Number	Number	Number	Number	Number	Percent	
Less than 20 cans	:	:	:	:	:	:	
(5 items)	: 58.0	55.6	61.6	76.8	76.6:	4.7	8.1
20 to 39 cans (7 items)	: 187.4	196.0	200.6	223.8	237.2:	12.5	6.7
Over 40 cans (5 items)	: 344.6	402.6	402.8	476.2	519.8:	43.8	12.7
Total	: 590.0	654.2	665.0	776.8	833.6:	60.9	10.3
Average percent difference: <sup>1/</sup>	:	:	:	:	:		
Weighted	: 0.0	10.9	1.8	19.0	9.6:	-	10.3
Unweighted	: 0.0	6.5	4.8	20.4	5.4:	-	9.3

<sup>1/</sup> Difference from preceding display expressed as average percentage of sales when 2 rows were displayed.

Although the average rate of increase or decrease from one size of display row to another was about 10 percent, there appear to be two significant departures from this average (table 4). A 4-row display sold on the average only slightly more than a 3-row display. On the other hand, a 5-row display sold considerably more than a 4-row display. The rate of change between the 4-row and 5-row display was about 20 percent, compared with the average rate of 10 percent.

The data do not indicate a close relationship between the size of cans and the rate of change in sales owing to a change in the size of the display. Table 5 shows a sales increase of 36.1 percent from adding 4 rows of canned vegetables in large can sizes (16 oz. and 17 oz.) compared with 47.8 percent more sales for vegetables in 8-ounce cans. The reverse relationship existed for canned fruits with sales increases of 42.8 percent for large can sizes and 37.2 for the 8-ounce cans.

Table 5.--Relationship between weekly sales by display rows of different sizes of cans of fruits and vegetables in 5 supermarkets, eastern metropolitan area, 1951

Commodity	Sales		Total	
	Items	with	sales increase	
	Number	2 rows	by adding 4 rows	
Canned vegetables:				
Large size cans (16 oz. and 17 oz.)	: 6	150.8	54.4	36.1
Small size cans (8 oz.)	: 4	167.0	79.8	47.8
Total	: 10	317.8	134.2	42.2
Canned fruits:				
Large size cans (17 oz. and 20 oz.)	: 3	145.2	62.2	42.8
Small size cans (8 oz.)	: 4	127.0	47.2	37.2
Total	: 7	272.2	109.4	40.2
Grand total (fruits and vegetables)	: 17	590.0	243.6	41.3

The total sales increase by adding 4 rows of canned vegetables was practically the same as that for canned fruit, 42.2 and 40.2 percent, respectively (table 5). Analysis indicated that there were no apparent differences in rate of response due to differences in the prices of the products.

The average weekly gross margin with respect to the 17 items was \$0.91 for the first 2 rows displayed or an average of \$0.46 per row (table 6). The average gross margin per row for each additional row in excess of 2 was only \$0.09. Gross margin per shelf-foot (1 linear foot of shelf space) for the first 2 rows was at the rate of \$1.34, and for the additional rows the gross margin was at the average rate of \$0.29. Gross margin was calculated by multiplying can sales by the differences in purchase and retail selling prices. The shelf space used was calculated to reflect the differences in the size of cans.

With the 2-row display weekly gross margins for the individual items ranged from \$0.17 to \$1.41 per row. The average additional gross margin for each added row varied among the items from minus \$0.05 to \$0.32. Gross margin per linear foot of shelf space used ranged from \$0.47 to \$4.40 with the 2-row display and minus \$0.16 to \$0.99 per linear foot for every additional row displayed (fig. 2).

The fact that the average sales and gross margin per unit of display space (row or foot) with the 2-row display greatly exceeded (on the average nearly 5 to 1) the additional sales or gross margin per added unit of display emphasizes the importance of considering the addition of new items to the shelf before increasing the display space beyond 2 rows, especially for slow-moving items. Only in the case of the high-volume items, peas (17 oz. and 8 oz.) and applesauce (17 oz.), did the gross margin for an additional row (beyond 2 rows) exceed that received per row for a 2-row display of any of the 17 items.

The effect of such factors as the (1) cost of stocking, (2) inconvenience and loss of sales caused by frequently running out of an item on the shelf, and (3) need for carrying in stock some items which yield little gross margin should be considered, in addition to the preceding findings, when determining the proper number of rows of an item to display. Furthermore, the extent that increased or decreased sales of individual items may be offset by an increase or decrease in the sales of competing items must be considered. For instance, as indicated previously, the total gross margin obtained from the sale of all brands of applesauce may not be increased at all or only slightly when the display of one brand of applesauce is increased from 2 to 6 rows. This further indicates that the added sales will be reduced by the degree of competition that the item has.

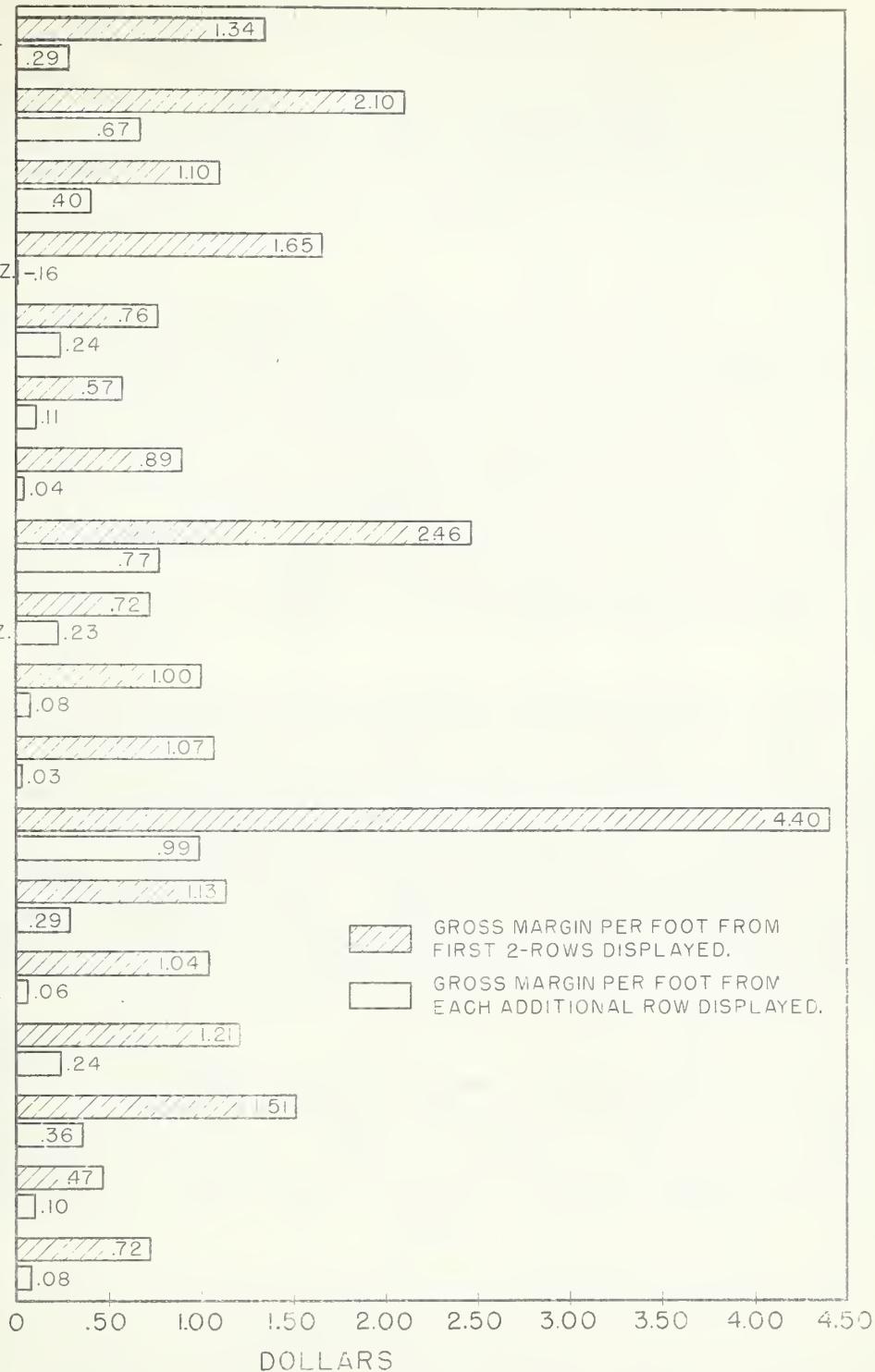
Table b.--Average weekly gross dollar margin per store per shelf foot received from displays of  
17 selected canned fruits and vegetables in 5 supermarkets, eastern metropolitan area, 1951

Commodity	Size of can	Gross margin per week			Added gross margin for each additional row in excess of 2 rows		
		Average for each of first 2 rows		Average per foot	Per row	Per foot	Dollars
		Ounces:::	Dollars	Dollars	Dollars	Dollars	Dollars
N B 1/ Peas	17	0.674		2.102		0.216	0.674
P B 2/ Cut green beans	17	.352		1.098		.128	.399
P B Cream style golden corn	17	.529		1.650		.050	- .156
P B Peas and carrots	17	.243		.758		.078	.243
N B Boiled onions	16	.190		.570		.038	.114
N E Fordhook limas	17	.284		.886		.012	.037
N B Peas	8	.905		2.465		.282	.768
P B Cream style golden corn	8	.265		.722		.086	.234
N B Boiled onions	8	.367		1.000		.030	.082
N B Fordhook limas	8	.393		1.070		.012	.033
N B Applesauce	17	1.409		4.396		.316	.986
N B Fruit cocktail	17	.363		1.132		.092	.287
N B Crushed pineapple	20	.320		1.037		.018	.058
N B Applesauce	8	.443		1.207		.090	.245
N B Fruit cocktail	8	.556		1.514		.132	.360
P B Royal Ann cherries	8	.172		.468		.036	.098
N B Crushed pineapple	8	.264		.719		.030	.082
Average (unweighted)		0.455		1.341		0.090	0.286

1/ National branded merchandise.

2/ Packer branded merchandise.

AVERAGE



GROSS MARGIN PER FOOT FROM FIRST 2-ROWS DISPLAYED.  
 GROSS MARGIN PER FOOT FROM EACH ADDITIONAL ROW DISPLAYED.

Figure 2.--Weekly gross dollar margin per store per shelf foot received from displays of 17 selected canned fruit and vegetable items in 5 supermarkets.

ESTIMATED RESULTS OF APPLYING CONCLUSIONS  
TO TWO TYPICAL SUPERMARKETS

In order to estimate (1) the amount of shelf space that might be made available by applying these conclusions, and (2) the increase of gross margin per shelf foot that might result, the findings were applied to records obtained in two stores. This section of the report sets forth the results from the application of these findings in these two stores, but at the time this report is being written these proposed displays had not been tested.

Prior to the controlled experiment reported in this publication, data were available (table 1) showing wide variations in the number of rows of canned fruits and vegetables displayed in supermarkets. For two of these supermarkets additional data had been collected with respect to (1) total number of cans displayed, (2) total sales for a period of 24 weeks, and (3) gross margins on each item. These data covered all the principal canned fruits and vegetables in 8-, 16-, and 17-ounce cans, a total of 83 separate items. During the 24-week period the number of cans on display and their shelf positions were kept constant. From these data calculations were made for the various items, showing weekly shelf turnover and gross margin per shelf foot of display.

Sales and gross returns obtained from operating the typical size displays for supermarket C are summarized in table 7, and in detail in Appendix tables 9, 10, 11, and 12 under the general box heading present display. For the 4 classes of items studied, the weekly sales averaged 2,881 cans and had a shelf turnover of 45 percent. A total of 69.11 shelf feet was used to display the items and this space returned a gross margin per shelf foot of \$1.76. Table 7 shows that the variation among the 4 classes studied was considerable. Turnover ranged from a low of 33 percent for large can sizes of vegetables to a high of 71 percent for large can sizes of fruits. Likewise, the gross margin per shelf foot varied from \$1.40 to \$2.44 for the same classes of items.

The items within the classes showed much more extreme variation. As shown in Appendix table 9, weekly turnover of vegetables in large can sizes varied from 14 percent to 78 percent with the gross margin per shelf foot varying from \$0.30 to \$3.89. Differences in the extremes for fruit in large can sizes (table 11) were even greater with a turnover as low as 21 percent and as high as 212 percent. Gross margin per shelf foot ranged from \$0.98 to \$6.58.

Sales and gross returns from operating with typical size displays for supermarket D are summarized in table 8, and in detail in Appendix tables 13, 14, 15, and 16. The average weekly sales for all items studied totaled 3,252 cans and showed an average turnover of 43 percent. A total of 79.5 shelf feet was used to display the items and returned a gross

Table 7.--Weekly quantities sold and gross margins received from *present* displays and estimates of *proposed* displays of canned fruits and vegetables in supermarket C, eastern metropolitan area, 24-week period, 1951

Item	Canned vegetables				Canned fruits		Total or average
	Unit	Large can 1/	8-oz. can 2/	Large can 3/	8-oz. can 4/		
	:	:	:	:	:		
<u>Present display:</u>	:	:	:	:	:		:
Rows in full display	: Number	86	89	52	53	:	280
Cans in full display	: Number	1,869	2,225	1,025	1,335	:	6,454
Weekly quantity sold	: Number	623	920	726	612	:	2,881
Turnover	: Percent	33	41	71	46	:	45
Weekly gross margin	: Dollars	31.79	31.91	34.52	23.62	:	121.84
Shelf-feet	: Number	22.70	20.20	14.17	12.04	:	69.11
Gross margin per shelf-foot	: Dollars	1.40	1.58	2.44	1.96	:	1.76
<u>Proposed display:</u>	:	:	:	:	:		:
Rows in full display	: Number	45	53	40	40	:	178
Cans in full display	: Number	1,010	1,325	832	1,010	:	4,177
Weekly quantity sold 5/	: Number	530	814	704	572	:	2,620
Turnover	: Percent	52	61	84	57	:	63
Weekly gross margin	: Dollars	27.04	28.25	33.08	21.93	:	110.30
Shelf-feet	: Number	11.93	12.02	11.00	9.09	:	44.04
Gross margin per shelf-foot	: Dollars	2.27	2.35	3.01	2.41	:	2.50
<u>Net difference:</u>	:	:	:	:	:		:
Shelf-feet available for other items	: Number	10.77	8.18	3.17	2.95	:	25.07
Increase gross margin per shelf-foot	: Dollars	.87	.77	.57	.45	:	.74
Proportion of original space available for other items	: Percent	47	40	22	24	:	36
Gross margin per shelf-foot presently obtained from space proposed for other items	: Dollars	.44	.45	.45	.57	:	.46

1/ For details see Appendix table 9.

2/ For details see Appendix table 10.

3/ For details see Appendix table 11.

4/ For details see Appendix table 12.

5/ Sales of each item under *present display* adjusted on the basis of average relationship between sales and display under controlled experiment.

Table 8.--Weekly quantities sold and gross margins received from *present* displays and estimates of *proposed* displays of canned fruits and vegetables in supermarket D, eastern metropolitan area, 24-week period, 1951

Item	Unit	Canned vegetables		Canned fruits		Total or average
		Large can 1/	8-oz. can 2/	Large can 3/	8-oz. can 4/	
		:	:	:	:	
<u>Present display:</u>	:	:	:	:	:	:
Rows in full display	: Number:	102	103	58	58	321
Cans in full display	: Number:	2,260	2,575	1,207	1,465	7,507
Weekly quantity sold	: Number:	780	1,013	813	646	3,252
Turnover	: Percent:	35	39	67	44	43
Weekly gross margin	: Dollars:	39.81	35.07	35.31	23.78	133.97
Shelf-feet	: Number:	27.02	23.40	15.92	13.18	79.52
Gross margin per shelf-foot	: Dollars:	1.47	1.50	2.22	1.80	1.68
<u>Proposed display:</u>	:	:	:	:	:	:
Rows in full display	: Number:	48	57	40	40	185
Cans in full display	: Number:	1,092	1,425	849	1,010	4,376
Weekly quantity sold 5/	: Number:	636	858	719	564	2,783
Turnover	: Percent:	58	60	85	56	64
Weekly gross margin	: Dollars:	32.48	29.76	31.52	20.98	114.86
Shelf-feet	: Number:	12.66	12.95	10.98	9.09	45.68
Gross margin per shelf-foot	: Dollars:	2.56	2.30	2.87	2.31	2.51
<u>Net difference:</u>	:	:	:	:	:	:
Shelf-feet available for other items	: Number:	14.36	10.45	4.94	4.09	33.84
Increase gross margin per shelf-foot	: Dollars:	1.09	.80	.65	.52	.83
Proportion of original space available for other items	: Percent:	53	45	31	31	43
Gross margin per shelf-foot presently obtained from space proposed for other items	: Dollars:	.51	.51	.77	.66	.56

1/ For details see Appendix table 13.

2/ For details see Appendix table 14.

3/ For details see Appendix table 15.

4/ For details see Appendix table 16.

5/ Sales of each item under *present display* adjusted on the basis of average relationship between sales and display under controlled experiment.

margin per shelf foot of \$1.68. Among the 4 classes of items in the study, turnover varied from 35 percent to 67 percent and gross margin ranged from \$1.47 to \$2.22 per shelf foot.

As shown in the Appendix tables, variation in turnover and gross margin per shelf foot among items for supermarket D were as great as for supermarket C.

The 24-week record of sales showed that in these two stores turnover and gross margin per shelf foot were extremely low for many individual items. Results from the controlled experiment indicated that at the possible loss of a small amount of sales of canned fruits and vegetables considerable shelf space could be made available to display other items that probably would return a higher gross margin. Under present display arrangements a considerable quantity of the stores' display space was serving primarily as a storage area.

As a basis for estimating the amount of display space that might be made available, without materially reducing the sales of items as calculated under the present display system, a modified display was proposed for stores C and D. These proposed displays included all the canned fruit and vegetable items currently displayed. Inasmuch as the controlled experiment showed that the major part of the sales of an item resulted from the first 2 rows displayed, the proposed displays, with certain exceptions, had only 2 rows per item. Exceptions were made for several fast-moving items in order to avoid an out of stock condition or a too frequent stocking of the shelves. Previous display practice for these exceptions was used to determine the number of rows of cans in the proposed display. A policy of two complete restockings per week with fill-ins for the fast-moving items was assumed for the proposed display plan.

Since results of the controlled experiment indicated that an average reduction of about 10 percent in sales of individual items accompanied each reduction of 1 row displayed, the estimated weekly sales under the proposed display system were calculated by reducing the actual sales under the present display system by 10 percent for each row the display was decreased. For reasons stated previously, this probably over estimated the reduction in gross margin to the store from sales of canned fruits and vegetables.

The estimated results from the proposed display in store C are shown in table 7, and in detail in Appendix tables 9, 10, 11, and 12. It was estimated that a total of 2,620 cans would be sold from the proposed display with an average turnover of 63 percent compared with a turnover from the present display of 45 percent. Estimated gross margin per shelf foot was increased from \$1.76 to \$2.50. Shelf space available for other items

was estimated at 25 feet, a reduction of 36 percent in space devoted to the selected items studied. From the present display it was estimated that this space would yield an average weekly gross margin of only \$0.46 per shelf foot. This is a relatively low return and there may be other items that could be substituted for the rows reduced and thereby increase the over-all margin for the store.

As shown in the Appendix tables, the estimated gross margin per shelf foot and the rate of turnover were increased materially for most items. The estimated gross margins per shelf foot were increased \$0.87 and \$0.77 for large and small cans, respectively, of vegetables, and \$0.57 and \$0.45 for large and small cans of fruits. Estimated maximum gross returns presently obtained from the space proposed for other items averaged \$0.44 and \$0.45 per shelf foot for the two sizes of cans of vegetables, and \$0.45 and \$0.57 per shelf foot for the two sizes of cans of fruits.

Estimated results from the proposed display in store D are shown in table 8, and in detail in Appendix tables 13, 14, 15, and 16. It was estimated that the proposed display would sell 2,783 cans with an average turnover rate of 64 percent. The turnover rate of the present canned fruit and vegetable display was 43 percent. Estimated gross margin per shelf foot was \$2.51 compared with \$1.68 from the present display. Space available for other items was nearly 34 shelf feet, a decrease in the size of the present display of 43 percent. The maximum gross margin per shelf foot this space is returning averages \$0.56.

The detailed results shown in the Appendix tables for store D are similar to those shown for store C. Estimated gross margin per shelf foot was increased as much as an average of \$1.09 for vegetables in large can sizes. Estimated maximum gross returns presently obtained from the space proposed for other items averaged \$0.51 per shelf foot for vegetables in both can sizes and \$0.77 and \$0.66 per shelf foot for fruits in large and small can sizes, respectively.

Examination of the detailed Appendix tables indicates that even with a display of only two rows the probable turnover and, therefore, the gross margin per shelf foot, for a number of items, is still excessively low. For example, for store C there are three items in table 9 where the estimated gross margin would be less than \$1 per shelf foot; in table 10 there are two items, and in table 12 there are two items. Items having such a small gross margin per shelf foot should receive further attention. A policy of reducing the minimum size of display to one row and of splitting cases probably would make it possible for many of the smaller operators to improve the turnover and gross margin per shelf foot on many of their slow-moving items.

Changes in the utilization of selling space for the two stores, in the direction indicated by the proposed displays, appear to be well

justified by the results of the controlled experiment. However, to determine adequately the effects of the proposals on sales and gross profits would necessitate adoption of the proposals on a trial basis. Two factors might tend to alter materially the results given in the preceding estimates. First, the use of a uniform 10-percent adjustment in sales for each display row and for each canned fruit and vegetable item (many of which were not included in the controlled experiment) might cause an error in the estimates. Second, in the controlled experiment, the effect of display size on volume of sales of the individual canned fruit and vegetable items was determined under a condition in which the over-all size of the department remained essentially constant. Therefore, the rate of sales reduction might be greater if the proposed display should reduce the over-all size of the department. On the other hand, any such tendency might well be offset by increased store traffic attracted by new items displayed in the released space. The net margin may be affected adversely to a minor extent with the reduction of rows displayed since more frequent stocking would be required with the proposed displays than with the former ones. Additional research is needed to determine more precisely what results might be expected.

## APPENDIX

Table 9. - Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of large can sizes of canned vegetables in supermarket C, eastern metropolitan area, 24-week period, 1951

Canned vegetable	Present display						Proposed display					
	Full display			Weekly quantity			Gross margin			Full display		
	Rows	Cans	No.	Quantity sold	Turn-over	No.	Gross margin	Margin : shelf-ft.	Rows	Cans sold	Turn-over	No.
	No.	No.	Pct.	Dol.	Dol.	No.	Dol.	Dol.	No.	Pct.	Dol.	No.
Cut asparagus	5	90	39.6	44	2.18	1.82	.98	.98	2	36	30.5	85
Cut wax beans	4	64	19.5	30	1.06	.98	.79	.79	2	32	16.2	51
Mixed vegetables	4	64	21.0	33	.79	.76	.64	.60	2	32	17.5	55
Peas and carrots	4	64	10.7	17	.64	.60	.99	.99	2	32	8.9	28
Boiled onions	3	36	14.1	39	.99	.99	1.32	1.32	2	24	12.8	53
Spinach	3	84	16.8	20	.88	.88	1.08	1.08	2	56	15.3	27
Diced beets	4	64	14.7	23	.74	.50	.50	.50	2	32	12.2	38
Diced carrots	3	48	6.7	14	.23	.30	.23	.30	2	32	6.1	19
Fordhook limas	3	84	17.2	20	.82	1.04	.82	1.04	2	56	15.6	28
Irish potatoes	4	112	42.7	38	1.39	1.28	1.28	1.28	2	56	35.6	64
Sweetpotatoes	3	75	33.7	45	1.50	1.42	1.50	1.42	2	50	30.6	61
Whole kernel white corn	5	80	15.3	19	.80	.62	.80	.62	2	32	11.8	37
Cream golden corn (brand A)	3	84	30.4	36	1.29	1.53	1.29	1.53	2	56	27.6	49
Green limas	2	56	12.6	22	.79	1.51	.79	1.51	2	56	12.6	22
French green beans	4	112	55.4	49	2.72	2.62	2.72	2.62	2	56	46.2	82
Cut green beans	4	112	55.0	49	4.05	3.89	4.05	3.89	2	56	45.8	82
Cream golden corn (brand B)	4	112	27.6	25	1.24	1.20	1.24	1.20	2	56	23.0	41
Whole kernel golden corn (brand A)	5	80	22.6	28	1.07	.82	1.07	.82	2	32	17.4	54
Whole kernel golden corn (brand B)	7	112	15.4	14	.68	.38	.68	.38	2	32	10.3	32
Peas (brand A)	4	112	38.1	34	2.79	2.68	2.79	2.68	2	56	31.8	57

Continued -

Table 9.-Weekly quantities sold and gross margins received from *present* displays and estimates of *proposed* displays of large can sizes of canned vegetables in supermarket C, eastern metropolitan area, 24-week period, 1951--Continued

Canned vegetable	Present display						Proposed display					
	Rows	Cans	Quantity : over	Gross	Margin	Rows	Cans	Quantity : over	Gross	Margin	Rows	Cans
	No.	No.	Pct.	Dol.	Dol.	No.	No.	Pct.	Dol.	Dol.	No.	No.
Sweet peas	4	112	26.6	24	1.16	1.12	2	56	22.2	40	.97	1.86
Peas (brand B)	4	112	87.7	78	3.98	3.82	3	84	80.4	96	3.65	4.67
Total or average	86	1,869	623.4	33	31.79	1.40	45	1,010	530.4	52	27.04	2.27

Present number of shelf-feet  
Proposed number of shelf-feet  
Available for other items  
Percent of original space available for other items  
Gross margin per shelf-foot presently obtained from  
space proposed for other items

\$ .44

Table 10.-Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of 8-ounce cans of canned vegetables in supermarket C, eastern metropolitan area, 24-week period, 1951

Canned vegetable	Present display						Proposed display					
	Full display		Weekly		Gross		Full display		Weekly		Gross	
	Rows	Cans	quantity:	Turn-over	gross	margin	Rows	Cans	quantity:	Turn-over	gross	margin
			sold	over	margin	shelf-ft.			sold	over	margin	shelf-ft.
	No.	No.	No.	Pct.	Dol.	Dol.	No.	No.	No.	Pct.	Dol.	Dol.
Cut asparagus	3	75	29.9	40	0.94	1.38	:	2	50	27.2	.54	0.86
Cut wax beans	3	75	38.9	52	1.17	1.71	:	2	50	35.4	.71	1.06
Mixed vegetables	3	75	14.7	20	.50	.73	:	2	50	13.4	.27	.46
Peas and carrots	4	100	40.0	40	1.49	1.64	:	2	50	33.3	.67	1.24
Boiled onions	4	100	27.7	28	1.30	1.43	:	2	50	23.1	.46	1.09
Spinach	3	75	33.2	44	.90	1.32	:	2	50	30.2	.60	.82
Diced beets	3	75	31.3	42	.87	1.28	:	2	50	28.4	.57	.79
Diced carrots	2	50	17.7	35	.37	.81	:	2	50	17.7	.35	.37
Fordhook limas	3	75	24.3	32	.82	1.20	:	2	50	22.1	.44	.74
Irish potatoes	3	75	48.3	64	1.23	1.80	:	2	50	43.9	.88	1.12
Sweetpotatoes	3	75	61.4	82	2.99	4.39	:	3	75	61.4	.82	2.99
Whole kernel white corn	3	75	27.6	37	1.21	1.78	:	2	50	25.1	.50	1.10
Cream golden corn (brand A)	4	100	12.7	13	.45	.50	:	2	50	10.6	.21	.37
Green limas	3	75	49.0	65	2.06	3.02	:	2	50	44.5	.89	1.87
French green beans	4	100	77.9	78	2.56	2.82	:	3	75	71.4	.95	2.35
Cut green beans	4	100	40.8	41	1.44	1.58	:	2	50	34.0	.68	1.20
Cream golden corn (brand B)	4	100	39.5	40	1.48	1.63	:	2	50	32.9	.66	1.23
Whole kernel golden corn (brand A)	3	75	18.0	24	.63	.92	:	2	50	16.4	.33	.57
Whole kernel golden corn (brand B)	4	100	33.4	33	1.19	1.31	:	2	50	27.8	.56	.99

Table 10.--Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of 8-ounce cans of canned vegetables in supermarket C, eastern metropolitan area, 24-week period, 1951.-Continued

Canned vegetable	Present display						Proposed display								
	Full display			Weekly			Gross			Full display			Weekly		
	Rows	Cans	Quantity:	Turn-over	gross	margin	Rows	Cans	quantity:	Turn-over	gross	margin	Rows	Cans	margin
	No.	No.	No.	Pct.	Dol.	Dol.	No.	No.	No.	Pct.	Dol.	Dol.	No.	No.	shelf-ft.
Peas (brand A)	: 4	100	54.7	55	1.91	2.10	:	2	50	45.6	91	1.60	21	45.6	3.52
Garden peas	: 4	100	53.9	54	1.85	2.04	:	2	50	44.9	90	1.54	20	44.9	3.38
Peas (brand B)	: 4	100	74.3	74	2.23	2.46	:	3	75	68.1	91	2.04	20	68.1	2.99
Lima-grand succotash	: 4	100	22.9	23	.91	1.00	:	2	50	19.1	38	.76	16	19.1	1.67
Peas (brand C)	: 6	150	19.2	13	.75	.55	:	2	50	13.7	27	.54	11	13.7	1.19
Lima grands	: 4	100	28.4	28	.66	.73	:	2	50	23.7	47	.55	12	23.7	1.21
Total or average	: 89	2,225	919.7	41	31.91	1.58	:	53	1,325	813.9	61	28.25	21	813.9	2.35

Present number of shelf-feet  
 Proposed number of shelf-feet  
 Available for other items  
 Percent of original space available for other items  
 Gross margin per shelf-foot presently obtained from  
 space proposed for other items

20.200  
 12.017  
 8.183  
 40  
 \$.45

Table 11.-Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of large can sizes of canned fruits in supermarket C, eastern metropolitan area, 24-week period, 1951

Canned fruit	Present display						Proposed display					
	Full display			Weekly			Gross margin			Full display		
	Rows	Cans	Quantity:	Turn-over	Gross	Margin	Rows	Cans	Quantity:	Turn-over	Gross	Margin
No.	No.	No.	No.	Pct.	Dol.	No.	No.	No.	No.	Dol.	Pct.	Dol.
Boysenberries	2	32	13.5	42	0.74	1.42	2	32	13.5	42	0.74	1.42
Kadota figs	2	32	12.4	39	.93	1.78	2	32	12.4	39	.93	1.78
Royal Ann cherries (brand A)	4	60	15.1	25	1.02	.98	2	30	12.6	42	.86	1.64
Royal Ann cherries (brand B)	4	60	12.5	21	1.28	1.23	2	30	10.4	35	1.07	2.05
Cranberry sauce	2	64	120.9	189	2.72	5.68	2	64	120.9	189	2.72	5.68
Citrus salad	3	45	19.6	44	1.31	1.61	2	30	17.8	59	1.19	2.28
Grapefruit sections	3	84	37.7	45	1.42	1.75	2	56	34.3	61	1.29	2.48
Apricots (halves)	2	48	18.7	39	1.59	2.39	2	48	18.7	39	1.59	2.39
Fruit salad	4	60	27.1	45	2.29	2.20	2	30	22.6	75	1.91	3.67
Crushed pineapple	4	60	21.4	36	1.18	1.08	2	30	17.8	59	.98	1.88
Applesauce	4	112	237.5	212	7.12	6.58	4	112	237.5	212	7.12	6.58
Bartlett pears (brand A)	4	60	21.6	36	1.48	1.42	2	30	18.0	60	1.24	2.37
Bartlett pears (brand B)	2	48	32.7	68	3.30	4.94	2	48	32.7	68	3.30	4.94
Sliced peaches	2	48	18.6	39	1.28	1.91	2	48	18.6	39	1.28	1.91
Fruit cocktail (brand A)	4	60	46.8	78	1.86	1.79	4	60	46.8	78	1.86	1.79
Fruit cocktail (brand B)	2	48	16.3	34	1.63	2.44	2	48	16.3	34	1.63	2.44
Pineapple tidbits (brand A)	2	48	22.7	47	1.02	2.33	2	48	22.7	47	1.02	2.33
Pineapple tidbits (brand B)	2	56	30.6	55	2.35	4.33	2	56	30.6	55	2.35	4.33
Total or average	52	1,025	725.7	71	34.52	2.44	40	832	704.2	84	33.08	3.01

Present number of shelf-feet 14,171  
 Proposed number of shelf-feet 11,003  
 Available for other items 3,168  
 Percent of original space available for other items 22  
 Gross margin per shelf-foot presently obtained from space proposed for other items \$.45

Table 12.-Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of 8-ounce cans of canned fruits in supermarket C, eastern metropolitan area, 24-week period, 1951

Canned fruit	Present display						Proposed display					
	Full display		Weekly quantity	Turn-over	Gross margin	Full display	Weekly quantity	Turn-over	Gross margin	Full display	Weekly quantity	Turn-over
	Rows	Cans sold	over	margin : shelf-ft.	Rows	Cans sold	over	margin : shelf-ft.	Rows	Cans sold	over	margin : shelf-ft.
	No.	No.	No.	Pct.	Dol.	No.	No.	Pct.	Dol.	No.	No.	Dol.
Boysenberries	: 2	50	15.9	32	0.76	1.67	: 2	50	15.9	32	0.76	1.67
Tropic figs	: 3	75	13.7	18	.76	1.12	: 2	50	12.4	25	.69	1.52
Royal Ann cherries (brand A)	: 3	75	17.8	24	.72	1.06	: 2	50	16.2	32	.65	1.43
Royal Ann cherries (brand B)	: 3	75	14.0	19	.97	1.42	: 2	50	12.7	25	.88	1.93
Cranberry sauce	: 2	60	48.8	81	1.00	2.20	: 2	60	48.8	81	1.00	2.20
Citrus salad (brand A)	: 2	50	10.3	21	.47	1.03	: 2	50	10.3	21	.47	1.03
Citrus salad (brand B)	: 2	50	10.0	20	.36	.79	: 2	50	10.0	20	.36	.79
Grapefruit sections (brand A)	: 4	100	28.1	28	1.28	1.41	: 2	50	23.4	47	1.06	2.33
Grapefruit sections (brand B)	: 3	75	28.1	37	1.00	1.47	: 2	50	25.5	51	.91	2.00
Apricots (halves)	: 3	75	31.7	42	1.46	2.14	: 2	50	28.8	58	1.33	2.92
Fruit salad	: 3	75	37.0	49	1.51	2.22	: 2	50	33.6	67	1.37	3.01
Crushed pineapple	: 2	50	35.5	71	1.66	3.65	: 2	50	35.5	71	1.66	3.65
Apple sauce	: 4	100	114.9	115	2.52	2.78	: 4	100	114.9	115	2.52	2.78
Bartlett pears (halves)	: 4	100	56.0	56	3.52	3.88	: 3	75	51.3	68	3.23	4.74
Sliced Y C peaches	: 3	75	46.4	62	2.01	2.95	: 2	50	42.2	84	1.83	4.02
Fruit cocktail	: 5	125	66.5	63	1.91	1.68	: 3	75	56.3	75	1.62	2.37
Pineapple tidbits	: 3	75	29.2	39	1.36	2.00	: 2	50	26.5	53	1.24	2.72
Greengage plums	: 2	50	8.1	16	.35	.77	: 2	50	8.1	16	.35	.77
Total or average	: 53	1,335	612.0	46	23.62	1.96	: 40	1,010	572.4	57	21.93	2.41

Present number of shelf-feet

Proposed number of shelf-feet

Available for other items

Percent of original space available for other items  
Gross margin per shelf-foot presently obtained from  
space proposed for other items

12.043

9.090

2.953

24

\$ .57

Table 13.-Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of large can sizes of canned vegetables in supermarket D, eastern metropolitan area, 24-week period, 1951

Canned vegetable	Present display						Proposed display					
	Full display			Weekly			Gross			Full display		
	Rows	Cans	quantity:	Turn-over	gross	margin	Rows	Cans	quantity:	Turn-over	gross	margin
	No.	No.	No.	Pct.	Dol.	Dol.	No.	No.	No.	Pct.	Dol.	Dol.
Cut asparagus	4	75	50.0	67	2.75	2.87	2	36	41.7	116	2.29	4.77
Cut wax beans	5	80	32.5	41	1.77	1.30	2	32	25.0	78	1.36	2.51
Mixed vegetables	5	80	24.3	30	.91	.70	2	32	18.7	58	.70	1.34
Peas and carrots	4	64	17.0	27	1.02	.94	2	32	14.2	44	.85	1.57
Boiled onions	4	48	15.5	32	1.08	1.08	2	24	12.9	54	.90	1.80
Spinach	3	84	24.9	30	1.31	1.60	2	56	22.6	40	1.19	2.20
Diced beets	4	64	13.6	21	.68	.65	2	32	11.3	35	.56	1.07
Diced carrots	4	64	9.2	14	.32	.31	2	32	7.7	24	.27	.52
Fordhook limas	4	112	16.5	15	.78	.54	2	56	13.8	25	.65	1.25
Irish potatoes	4	112	55.4	49	1.80	1.66	2	56	46.2	82	1.50	2.77
Sweetpotatoes	5	125	48.5	39	2.16	1.06	2	48	37.3	78	1.66	2.34
Whole kernel white corn	5	80	21.4	27	1.12	.86	2	32	16.5	52	.87	1.67
Cream golden corn (brand A)	3	84	28.6	34	1.22	1.56	2	56	26.0	46	1.10	2.12
Green limas	4	112	13.4	12	.84	.80	2	56	11.2	20	.70	1.34
French green beans	4	112	73.5	66	3.62	3.47	3	84	67.4	80	3.32	4.25
Cut green beans	4	112	59.0	53	4.35	4.17	3	84	54.1	64	3.99	5.11
Cream golden corn (brand B)	4	112	32.8	29	1.48	1.42	2	56	27.3	49	1.23	2.36

Table 13.--Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of large can sizes of canned vegetables in supermarket D, eastern metropolitan area, 24-week period, 1951.--Continued

Present display										Proposed display			
Full display		Weekly		Gross		Full display		Weekly		Gross		gross	
Rows	Cans	quantity	Turn-over	gross	margin	Rows	Cans	quantity	Turn-over	gross	margin	gross	margin
No.	No.	No.	Pct.	Dol.	Dol.	No.	No.	No.	No.	Pct.	Dol.	Dol.	Dol.
Whole kernel golden corn (brand A)	7	112	31.8	28	1.51	0.83	2	32	21.2	66	1.01	1.94	
Whole kernel golden corn (brand B)	6	96	18.1	19	.80	.52	2	32	12.9	40	.57	1.09	
Peas (brand A)	6	168	54.5	32	3.99	2.56	2	56	38.9	69	2.85	5.47	
Sweet peas	6	168	32.7	19	1.43	.92	2	56	23.4	42	1.02	1.96	
Peas (brand B)	7	196	107.2	55	4.87	2.67	4	112	85.7	76	3.89	3.73	
Total or average	102	2,260	780.4	35	39.81	1.47	48	1,092	636.0	58	32.48	2.56	

Present number of shelf-feet	27.023
Proposed number of shelf-feet	12.658
Available for other items	14.365
Percent of original space available for other items	53
Gross margin per shelf-foot presently obtained from space proposed for other items	\$.51

Table 14.-Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of 8-ounce cans of canned vegetables in supermarket D, eastern metropolitan area, 24-week period, 1951

Canned vegetable	Present display						Proposed display						
	Full display		Weekly		Turn-over		Gross margin		Full display		Weekly		
	Rows :	Cans :	quantity:	Turn-over	margin	shelf-ft.	Rows :	Cans :	quantity:	Turn-over	margin	Gross margin	
	No.	No.	No.	Pct.	Dol.	Dol.	No.	No.	No.	Pct.	Dol.	Dol.	
Cut asparagus	: 3	75	41.2	55	1.30	1.91	:	2	50	37.4	75	1.18	2.59
Cut wax beans	: 3	75	33.5	45	1.00	1.47	:	2	50	30.4	61	.91	2.00
Mixed vegetables	: 4	100	19.8	20	.68	.75	:	2	50	16.5	33	.56	1.23
Peas and carrots	: 4	100	35.3	35	1.32	1.45	:	2	50	29.4	59	1.10	2.42
Boiled onions	: 4	100	30.5	30	1.44	1.58	:	2	50	25.4	51	1.20	2.64
Spinach	: 4	100	41.0	41	1.11	1.22	:	2	50	34.1	68	.92	2.02
Diced beets	: 2	50	30.5	61	.84	1.85	:	2	50	30.5	61	.84	1.85
Diced carrots	: 3	75	18.6	25	.39	.57	:	2	50	16.9	34	.36	.79
Fordhook limas	: 4	100	37.2	37	1.25	1.38	:	2	50	31.0	62	1.04	2.28
Irish potatoes	: 5	125	57.1	46	1.45	1.28	:	3	75	48.3	64	1.23	1.80
Sweetpotatoes	: 5	125	81.1	65	3.95	3.48	:	4	100	74.8	75	3.64	4.01
Whole kernel white corn	: 3	75	27.4	36	1.20	1.76	:	2	50	24.9	50	1.09	2.40
Cream corn	: 3	75	10.5	14	.37	.54	:	2	50	9.5	19	.33	.72
Green limas	: 3	75	49.0	65	2.06	3.02	:	2	50	44.5	89	1.87	4.11
French green beans	: 5	125	79.0	63	2.60	2.29	:	3	75	66.8	89	2.20	3.23
Cut green beans	: 5	125	43.1	34	1.52	1.34	:	2	50	33.2	66	1.18	2.59
Cream golden corn	: 5	125	32.8	26	1.23	1.08	:	2	50	25.2	50	.94	2.07
Whole kernel golden corn (brand A)	: 5	125	20.1	16	.70	.62	:	2	50	15.5	31	.54	1.19
Whole kernel golden corn (brand B)	: 5	125	35.3	28	1.26	1.11	:	2	50	27.2	54	.97	2.13

Table 14.-Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of 8-ounce cans of canned vegetables in supermarket D, eastern metropolitan area, 24-week period, 1951.-Continued

Canned vegetable	Present display						Proposed display					
	Full display			Weekly : Turn-over			Gross margin : shelf-ft.			Full display		
	Rows	Cans sold	Quantity: over	Rows	Gross margin	Turn-over	Rows	Cans sold	Quantity: over	Rows	Gross margin	Turn-over
Peas (brand A)	6	150	77.5	52	2.71	1.90	3	75	60.9	81	2.13	3.13
Peas (brand B)	6	150	50.2	33	1.73	1.27	2	50	35.8	72	1.23	2.70
Peas (brand C)	6	150	88.2	59	2.65	1.94	4	100	75.6	76	2.27	2.50
Lima grand succotash	3	75	16.9	22	.67	.98	2	50	15.4	31	.61	1.34
Peas (brand D)	3	75	20.3	27	.80	1.17	2	50	18.4	37	.72	1.58
Lima grands	4	100	36.5	36	.84	.92	2	50	30.4	61	.70	1.54
Total or average	103	2,575	1,012.6	39	35.07	1.50	57	1,425	858.0	60	29.76	2.30

Present number of shelf-feet  
 Proposed number of shelf-feet  
 Available for other items  
 Percent of original space available for other items  
 Gross margin per shelf-foot presently obtained from  
 space proposed for other items

23.405  
 12.953  
 10.452  
 45  
 \$.51

Table 15.--Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of large can sizes of canned fruits in supermarket D, eastern metropolitan area, 24-week period, 1951

Canned fruit	Present display						Proposed display					
	Full display			Weekly quantity			Gross margin			Full display		
	Rows	Cans	Turn-over	gross	margin	shelf-ft.	Rows	Cans	Turn-over	gross	margin	shelf-ft.
	No.	No.	No.	Pct.	Dol.	Dol.	No.	No.	No.	Pct.	Dol.	Dol.
Boysenberries	:	2	32	12.5	.39	.69	1.32	:	2	32	12.5	.39
Kadota figs	:	2	32	19.4	.61	1.45	2.78	:	2	32	19.4	.61
Royal Ann cherries (brand A)	:	3	45	13.1	.29	.89	1.14	:	2	30	11.9	.40
Royal Ann cherries (brand B)	:	3	45	10.1	.22	1.03	1.32	:	2	30	9.2	.31
Cranberry sauce	:	3	96	157.8	164	3.55	7.41	:	3	96	157.8	164
Citrus salad	:	4	60	17.3	.29	1.15	1.06	:	2	30	14.4	.48
Grapefruit sections	:	3	84	30.9	.37	1.16	1.44	:	2	56	28.1	.50
Apricots (halves)	:	2	48	11.8	.24	1.00	1.50	:	2	48	11.8	.24
Fruit salad	:	4	60	19.2	.32	1.62	1.30	:	2	30	16.0	.53
Crushed pineapple	:	3	45	15.7	.35	.86	1.06	:	2	30	14.3	.48
Applesauce	:	7	196	328.7	168	9.86	5.20	:	4	112	263.0	235
Bartlett pears (brand A)	:	4	60	20.5	.34	1.41	1.36	:	2	30	17.1	.57
Bartlett pears (brand B)	:	3	72	25.0	.35	2.52	2.52	:	2	48	22.7	.47
Sliced peaches	:	4	96	30.9	.32	2.11	1.58	:	2	48	25.8	.54
Fruit cocktail (brand A)	:	4	60	37.2	.62	1.48	1.42	:	3	45	34.1	.76
Fruit cocktail (brand B)	:	2	48	16.0	.33	1.60	2.40	:	2	48	16.0	.33
Pineapple tidbits (brand A)	:	3	72	21.2	.29	.95	1.45	:	2	48	19.3	.40
Pineapple tidbits (brand B)	:	2	56	25.8	.46	1.98	3.66	:	2	56	25.8	.46
Total or average	:	58	1,207	813.1	67	35.31	2.22	:	40	849	719.3	85
												31.52
												2.87
Present number of shelf-feet												15.915
Proposed number of shelf-feet												10.980
Available for other items												4.935
Percent of original space available for other items												31
Gross margin per shelf-foot presently obtained from space proposed for other items												\$ .77

Table 16.-Weekly quantities sold and gross margins received from present displays and estimates of proposed displays of 8-ounce cans of canned fruits in supermarket D, eastern metropolitan area, 24-week period, 1951

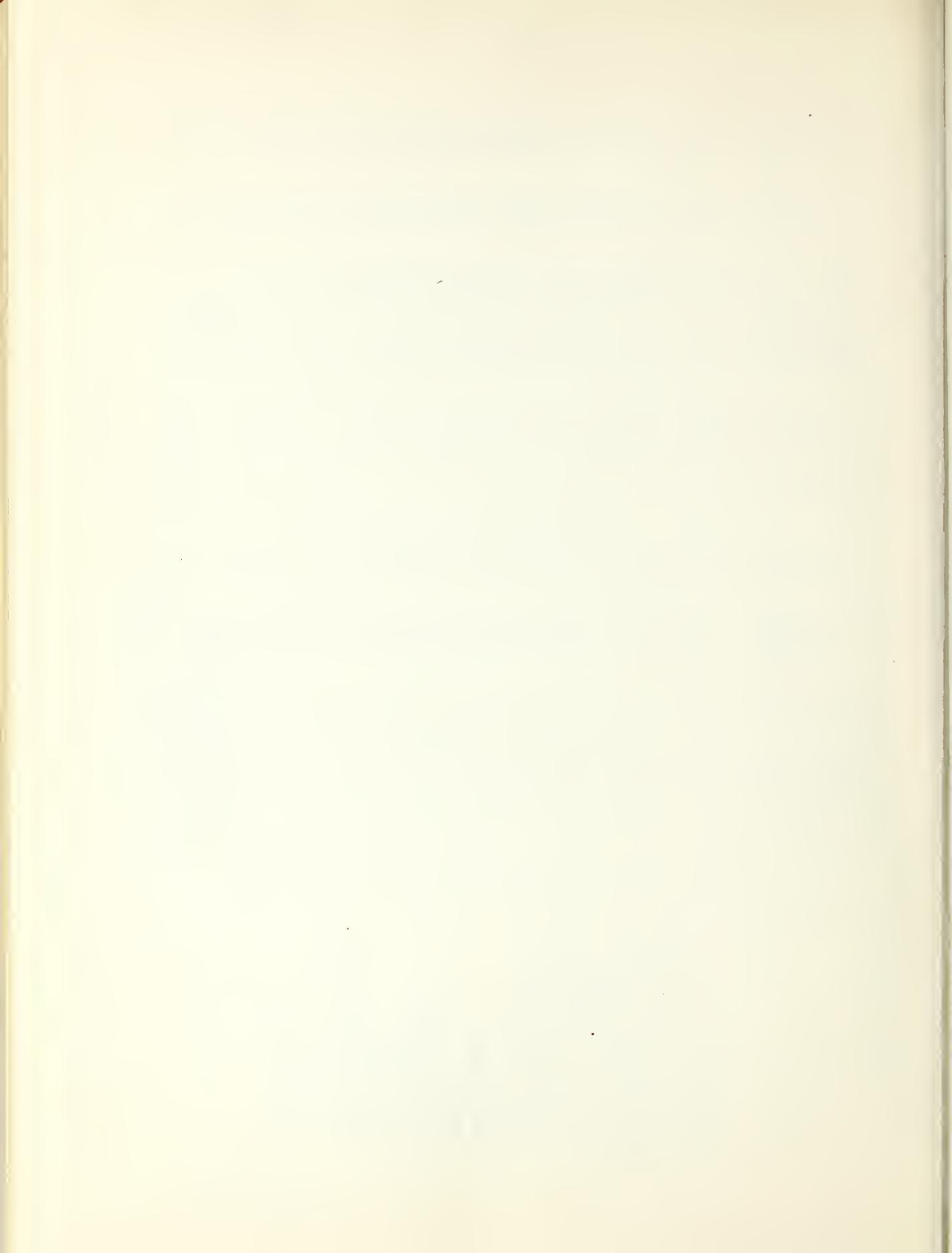
Canned fruit	Present display						Proposed display					
	Full display		Weekly		Gross margin		Full display		Weekly		Gross margin	
	Rows	Cans	Quantity sold	Turn-over	Gross margin	shelf-ft.	Rows	Cans	Quantity sold	Turn-over	Gross margin	shelf-ft.
	No.	No.	No.	Pct.	Dol.	No.	No.	No.	No.	Pct.	Dol.	No.
Boysenberries	:	2	50	11.4	23	0.55	1.20	:	2	50	11.4	23
Tropic figs	:	2	50	9.3	19	.52	1.13	:	2	50	9.3	19
Royal Ann cherries (brand A)	2	50	14.4	29	.58	1.28	:	2	50	14.4	29	
Royal Ann cherries (brand B)	2	50	12.4	25	.86	1.90	:	2	50	12.4	25	
Cranberry sauce	:	3	90	53.6	60	1.09	1.60	:	2	60	48.7	81
Citrus salad (brand A)	:	3	75	9.8	13	.45	.66	:	2	50	8.9	18
Citrus salad (brand B)	:	3	75	4.7	6	.17	.24	:	2	50	4.3	9
Grapefruit sections (brand A)	4	100	30.2	30	1.37	1.51	:	2	50	25.2	50	11.14
Grapefruit sections (brand B)	3	75	30.5	41	1.09	1.60	:	2	50	27.7	55	.99
Apricots (halves)	:	3	75	27.7	37	1.28	1.88	:	2	50	25.2	50
Fruit salad	:	3	75	37.1	49	1.51	2.22	:	2	50	33.7	67
Crushed pineapple	:	3	75	36.0	48	1.68	2.47	:	2	50	32.7	65
Applesauce	:	7	175	141.1	81	3.09	1.94	:	4	100	112.9	113
Bartlett pears (halves)	:	4	100	50.0	50	3.15	3.46	:	2	50	41.7	83
Sliced Y C peaches	:	3	75	37.8	50	1.64	2.40	:	2	50	34.4	69
Fruit cocktail	:	5	125	97.2	78	2.79	2.46	:	4	100	89.7	90
Pineapple tidbits	:	4	100	32.8	33	1.53	1.69	:	2	50	27.3	55
Greengage plums	:	2	50	10.1	20	.43	.96	:	2	50	10.1	20
Total or average	:	58	1,465	646.1	44	23.78	1.80	:	40	1,010	570.0	56

Present number of shelf-feet  
Proposed number of shelf-feet  
Available for other items  
Percent of original space available for other items  
Gross margin per shelf-foot presently obtained from  
proposed space for other items

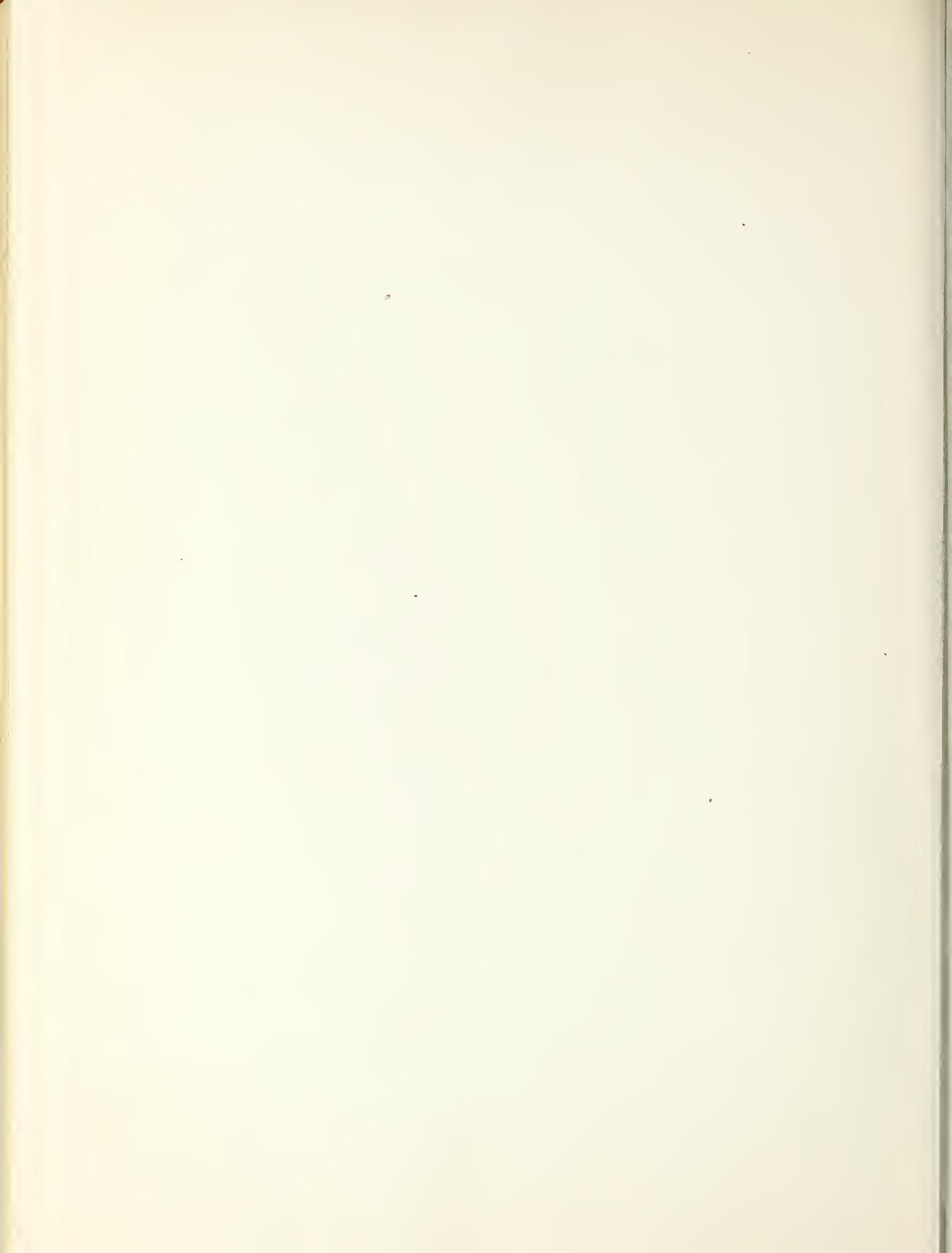
\$ .66

13.180  
9.091  
4.089

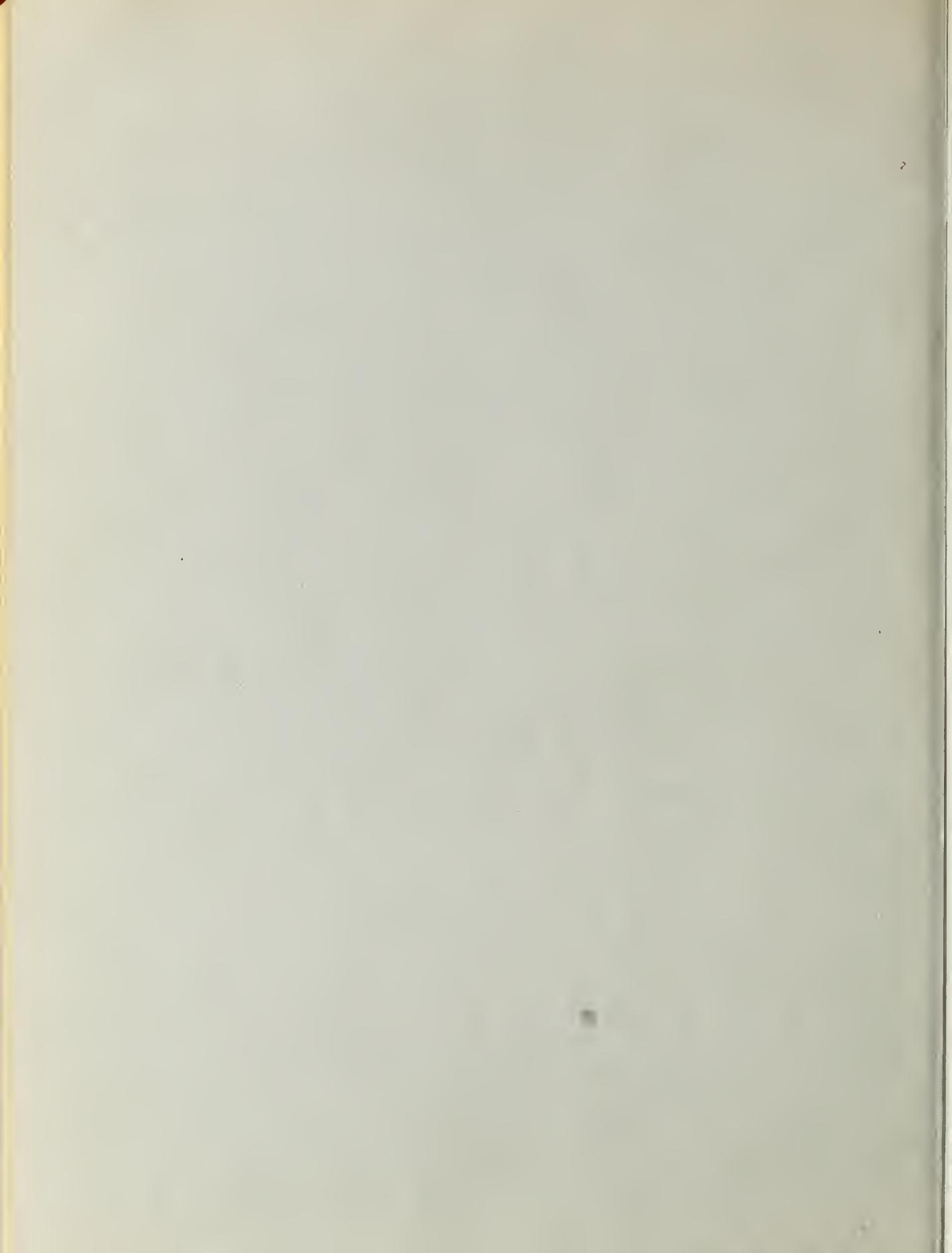
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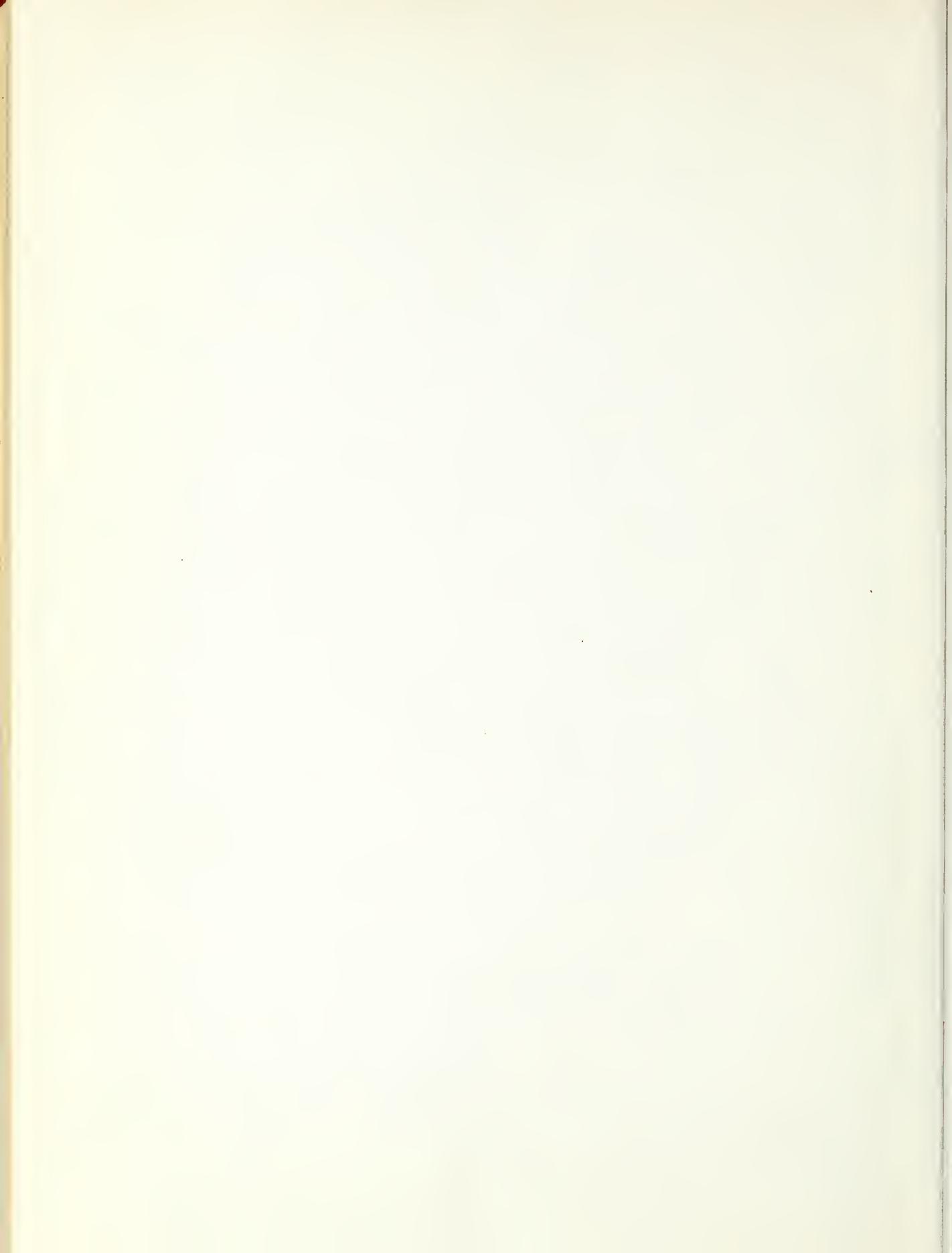


















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