

EGG MERCHANDISING STUDIES IN SUPERMARKETS

PART VI: MARKETING CRACKED EGGS (A Progress Report)



By

E. M. Moore and L. B. Darrah

Department of Agricultural Economics
Cornell University Agricultural Experiment Station
New York State College of Agriculture
Cornell University, Ithaca, New York

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
THE DEVELOPMENT OF ECON-O-CRAX	1
RETAIL STORE STUDIES	2
Ithaca Test	2
Volume of Egg Sales	2
Pricing	3
Importance of Econ-O-Crax Sales	5
Consumer Survey	6
Use of Cracked Eggs	7
Reason for Purchases	7
Importance of Substitution	8
Personal Interviews	8
Rochester Test	9
First Test	9
Second Test	10
Other Tests	11
Store A	11
Store B	12
Store C	13
WHOLESALE CRACKED EGGS	13
Volume of Cracked Eggs	14
Price of Cracked Eggs	14
SUMMARY AND CONCLUSIONS	16

MARKETING CRACKED EGGS THROUGH RETAIL OUTLETS

INTRODUCTION

Eggs with cracked shells generally sell for substantially less than eggs with sound shells. However, many of the cracked eggs are only slightly cracked with no shell membrane damage or have only blind checks. Nevertheless, this defect places the eggs in a lower grade even though the interior quality may be equivalent to that of a Grade A egg.

The extent of shell damage to eggs moving from farm to market was shown in a study by Earle.^{1/} Approximately 7 per cent of all eggs showed some shell damage by the time they reached the wholesale market. When eggs were graded at the farm, an average of 4.4 per cent showed some shell damage. Another 2.8 per cent of the eggs were damaged either on the pick-up routes, at the country pick-up stations, or in transit to the wholesale market. Since elimination of the causes of shell damage is difficult, poultrymen and egg handlers are continually striving to find new methods for successfully marketing cracked eggs.

The purpose of this study was to test a new technique for marketing cracked eggs through retail outlets.^{2/} An attempt was made to offer consumers a good quality cracked egg at a price which might encourage consumers to buy them and thereby increase returns to poultrymen and egg handlers.

THE DEVELOPMENT OF ECON-O-CRAX

In a recent study of egg purchasing practices, a relatively large proportion of urban families expressed a willingness to buy cracked eggs if they were available.^{3/} In Ithaca, New York, 59 per cent of the housewives interviewed indicated they would purchase cracked eggs. This study also showed that relatively more low income families than high income families would be willing to buy cracked eggs.

Many consumers buy cracked eggs directly from producers or grading plants. However, this practice is costly and inconvenient for both the consumer and the egg handler. This suggests that there might be an opportunity to merchandise cracked eggs in retail grocery stores.

To merchandise cracked eggs in retail stores, a carton was required which would serve as a container for the eggs. A pulpboard type carton was selected

^{1/} W. G. Earle, "Marketing Eggs Through Wholesale Channels," Thesis, Cornell University, June 1950.

^{2/} A cracked egg, as used in this study, is an egg with a blind check or a shell fracture which has not damaged the shell membrane.

^{3/} E. M. Moore, "Purchasing Practices and Quality Recognition for Eggs, Ithaca, New York," A.E. 835, Department of Agricultural Economics, Cornell University, August 1952.

as it offered the most protection to the cracked eggs and also eliminated leakage problems if the eggs were further damaged. It was also desired to use the container as a media for telling the consumer what cracked eggs were and how they could be used.

The carton was designed to clearly identify the product. The name Econ-O-Crax was used to infer that the eggs were cracked and also an economy buy. A verse was used to convey at least three ideas to the customer. First, that the eggs were fresh. Second, that the eggs were candled and of a good quality even though New York State Grading Laws required a Grade C label on the carton, and third, that these eggs were good for cooking, baking or table use. The verse used is as follows:

"TWELVE NEW LAID EGGS -- NEATLY PACKED, ON
THE WAY TO MARKET WERE SLIGHTLY CRACKED;
GOOD FOR COOKING, BAKING -- GOOD TO EAT.
AS AN ECONOMY BUY, THEY'RE HARD TO BEAT."

RETAIL STORE STUDIES

To determine customers' response to Econ-O-Crax eggs, a series of experiments were conducted in selected stores in an attempt to get a broad picture of the acceptance of these eggs. The experiments were designed to determine: (1) The number of cracked eggs consumers would purchase in grocery stores. (2) The effect Econ-O-Crax sales would have on total egg sales. (3) The acceptance of Econ-O-Crax eggs in stores located in different areas. (4) The use made of these eggs, and (5) the importance of Econ-O-Crax sales to egg producers and handlers in terms of net returns for their eggs.

Ithaca Test

In June 1954, the first Econ-O-Crax eggs were offered for sale in a large Ithaca, New York, supermarket. These eggs were placed in the store as an additional line of eggs. There was no advance publicity or any point of sale promotional work done at any time. This study was continued for a period of one year.

Volume of Egg Sales

During June, the first month of the study, Econ-O-Crax sales averaged 163 dozens per week (table 1). Sales increased to 187 dozens in July. Sales of cracked eggs continued to grow until November when they averaged 288 dozens per week. Thereafter, sales leveled off and held at approximately the November level for the balance of the year.

Table 1.

AVERAGE WEEKLY SALES OF EGGS
One Supermarket, Ithaca, New York.
June 1954-May 1955

Month	Sales of eggs			
	Large	Medium	Econ-O-	All
	A	A	Crax	eggs
	Dozens			
June	384	206	163	753
July	376	313	187	876
August	344	342	174	860
September	350	427	187	964
October	334	504	270	1,108
November	288	525	288	1,101
December	343	310	276	929
January	481	394	264	1,139
February	433	305	264	1,002
March	415	185	282	882
April	512	154	302	968
May	402	151	282	835
Year	390	321	247	958

Total egg sales ranged from 753 dozens in June to 1,139 dozens in January, and averaged 958 dozens per week for the year. This compares with an average of 693 dozens per week for the previous year when Econ-O-Crax were not offered for sale or an increase of 38 per cent in average weekly egg sales.

Econ-O-Crax represented nearly 26 per cent of total egg sales during the year and accounted for about two-thirds of the change in egg sales from the previous year (table 2). Cracked egg sales ranged from a low of 19.5 per cent of total sales in September to about 34 per cent of total sales in May. Large eggs accounted for about 41 per cent and medium eggs 34.6 per cent of total egg sales during the year.

Pricing

During the first two months of the study, Econ-O-Crax eggs were priced at about 80 per cent of the Large Grade A price (table 3). This was at the request of the research workers. After this period, the price was determined by the wholesaler supplying the store with eggs. This price ranged from 69 per cent of the Large Grade A price in October 1954 to 92 per cent in January 1955. The average weekly price for Econ-O-Crax during the year was 80 per cent of the Large Grade A price. The price of Econ-O-Crax relative to large eggs appeared to have but little effect on their sale.

Table 2. PROPORTION EACH TYPE OF EGGS WAS OF TOTAL SALES
One Supermarket, Ithaca, New York,
June 1954-May 1955

Month	Type of eggs			
	Large	Medium	Econ-O-	All
	A	A	Crax	eggs
	Per cent			
June	51.0	27.4	21.6	100
July	43.0	35.7	21.3	100
August	40.0	39.8	20.2	100
September	36.3	44.2	19.5	100
October	30.1	45.5	24.4	100
November	26.1	47.6	26.3	100
December	36.9	33.4	29.7	100
January	42.2	34.6	23.2	100
February	43.2	30.4	26.4	100
March	47.0	21.0	32.0	100
April	52.9	15.9	31.2	100
May	48.1	18.1	33.8	100
Year	40.8	33.5	25.8	100

Table 3. RELATIONSHIP OF ECON-O-CRAX PRICE TO LARGE GRADE A,
AND MEDIUM GRADE A PRICES, BY MONTHS
One Supermarket, Ithaca, New York,
June 1954-May 1955

Month	Per cent Econ-O-Crax price was of:	
	Large Grade A	Medium Grade A
	price	price
June	81	91
July	80	96
August	74	100
September	72	101
October	69	102
November	73	97
December	84	97
January	92	99
February	87	92
March	84	87
April	79	84
May	86	92
Year	80	94

The price of cracked eggs during the year ranged from 84 per cent of the Medium Grade A price in April to 102 per cent in October. During the summer, fall, and early winter months, Econ-O-Crax and Medium Grade A prices were about the same. In later months, when the price differential between large

and medium eggs was smaller, Econ-O-Crax undersold medium eggs by as much as 8 to 16 percentage points.

There was some relationship between Econ-O-Crax sales and their prices relative to Medium Grade A egg prices. As the price of Econ-O-Crax approached and exceeded the Medium Grade A price, cracked egg sales were relatively low. On the other hand, as the price of Econ-O-Crax fell below the Medium Grade A price, cracked egg sales became relatively more important.

Importance of Econ-O-Crax Sales

Sales of a particular product per 100 customers patronizing a store are useful in comparing the results of various merchandising practices within a store and between stores. This method eliminates one of the more important variables affecting sales, changes in the number of customers shopping in a store.

Table 4 shows that Econ-O-Crax sales averaged 3.7 dozens per 100 customers per week in June 1954. After the first four months, during which time Econ-O-Crax sales remained relatively constant, cracked egg sales began to increase, reaching a peak of 6.8 dozens per 100 customers in December. Cracked egg sales then leveled out and ranged from 6.1 to 6.8 dozens per 100 customers per week.

Table 4. AVERAGE WEEKLY SALES OF EGGS PER 100 CUSTOMERS, BY MONTHS
One Supermarket, Ithaca, New York,
June 1954-May 1955

Month	Sales per 100 customers			
	Large	Medium	Econ-O-	All
	A	A	Crax	eggs
	<u>Dozens</u>			
June	8.6	4.7	3.7	17.0
July	8.0	6.6	4.0	18.6
August	7.3	7.2	3.7	18.2
September	7.7	9.4	4.1	21.2
October	7.2	10.9	5.9	24.0
November	6.3	11.5	6.3	24.1
December	8.4	7.7	6.8	22.9
January	11.1	9.0	6.1	26.2
February	10.4	7.3	6.4	24.1
March	9.3	4.1	6.3	19.7
April	11.5	3.5	6.8	21.8
May	9.1	3.4	6.3	18.8
Year	8.7	7.2	5.5	21.4

The average weekly sales per 100 customers from June 1954 to May 1955 were compared with sales for the previous year by months (table 5). Egg sales increased an average of 5.9 dozens per 100 customers from one year to the next. Sales of Econ-O-Crax eggs appear to be mainly responsible for this increase, accounting for 5.5 dozens per week per 100 customers. However, other factors such as price differences, both in eggs and in substitute products, changes in customer buying habits, and changes in store practices, may have affected sales.

Table 5. INCREASE IN AVERAGE WEEKLY EGG SALES PER 100 CUSTOMERS
BY MONTHS, COMPARED WITH ECON-O-CRAX SALES
One Supermarket, Ithaca, New York,
1953-54 - 1954-55

Month	Sales per 100 customers		1954-55 increase in sales	1954-55 sales of Econ-O-Crax per 100 customers
	1953-54	1954-55		
	<u>Dozens</u>			
June	11.7	17.0	5.3	3.7
July	12.2	18.6	6.4	4.0
August	9.8	18.2	8.4	3.7
September	14.3	21.2	6.9	4.1
October	14.2	24.0	9.8	5.9
November	17.7	24.1	6.4	6.3
December	15.9	22.9	7.0	6.8
January	18.2	26.2	8.0	6.1
February	18.0	24.1	6.1	6.4
March	17.9	19.7	1.8	6.3
April	18.6	21.8	3.2	6.8
May	17.3	18.8	1.5	6.3
Year	15.5	21.4	5.9	5.5

These results are very important because many interested in the marketing of eggs want to know if cracked eggs are sold in addition to, or as a substitute for other eggs. This information seems to indicate that a large part of these sales are in addition to the purchase of other eggs or that customers who did not ordinarily buy eggs in this store bought Econ-O-Crax.

Consumer Survey

A consumer survey was conducted to more clearly determine what their reactions were toward buying cracked eggs in retail stores. During the first week Econ-O-Crax were offered for sale, a postal card was placed in each carton of cracked eggs. This survey was designed to determine the intended use of cracked eggs, the reason for purchasing these eggs and to learn if they were purchased in place of or in addition to other eggs. The purchaser was requested to fill out and mail the card. Fifty-two, or about 30 per cent, of the cards were returned. Since many customers bought two or more dozens of these eggs, the response was higher than 30 per cent.

Nearly one year later, in April 1955, when the customers had developed a more definite buying pattern for Econ-O-Crax, a second consumer survey was conducted. This survey was to determine how many customers were now regular users of Econ-O-Crax, the use made of the eggs, whether the purchases were in place of, or in addition to other eggs, and the reasons for purchasing Econ-O-Crax.

In the second survey the postal cards were again placed in the cartons, but an additional incentive was offered the customer in an attempt to obtain a greater number of returns. The customer was offered a coupon worth 10 cents toward the purchase of one dozen Econ-O-Crax if the card was filled out and returned. Postal cards were placed in 400 cartons and 171, or about 43 per cent, of the cards were returned.

Use of Cracked Eggs. The first survey showed that over two-thirds of the respondents used the eggs for all purposes (table 6). About 17 per cent used the eggs for cooking or baking, and 13 per cent for table use. In the second survey, a larger proportion of the respondents, over 80 per cent, said they were using these cracked eggs for all purposes. A few used them for table use only and 13 per cent for cooking and baking only.

Table 6. USE OF ECON-O-CRAX EGGS
Ithaca, New York,
June 1954 and April 1955

Use	First survey		Second survey	
	Number of respondents	Per cent of total	Number of respondents	Per cent of total
Table use only	7	13.5	6	3.5
Cooking and baking only	9	17.3	23	13.4
All purposes	36	69.2	140	81.9
No reply	-	-	2	1.2
Total	52	100.0	171	100.0

Reason for Purchases. Of the 52 respondents in 1954, 77 per cent gave price as the major reason for purchasing cracked eggs (table 7). Nearly one-fifth indicated that price combined with quality and use was the reason for buying Econ-O-Crax. The second survey also showed that price was the primary reason for buying Econ-O-Crax eggs.

Table 7. REASON FOR PURCHASING ECON-O-CRAX EGGS
Ithaca, New York,
June 1954 and April 1955

Reason	First survey		Second survey	
	Number of respondents	Per cent of total	Number of respondents	Per cent of total
Price	40	77.0	67	39.6
Price, quality, and use	10	19.2	94	54.7
Other	2	3.8	8	4.6
No reply	-	-	2	1.1
Total	52	100.0	171	100.0

Importance of Substitution. One of the most important factors in the merchandising of Econ-O-Crax is the effect these eggs have on other egg sales. Therefore, the purchasers were asked if they bought Econ-O-Crax in place of or in addition to other eggs. In the initial survey, nearly 70 per cent indicated Econ-O-Crax were substituted for other eggs (table 8). About the same proportion of customers in the second survey said Econ-O-Crax replaced their purchases of other eggs. The substitution could be for eggs purchased from this store, but to a large degree it was for eggs purchased from other sources. The balance of the customers indicated that they purchased Econ-O-Crax in addition to other eggs.

Table 8. EXTENT OF SUBSTITUTION OF ECON-O-CRAX FOR OTHER EGGS
Ithaca, New York
June 1954 and April 1955

Item	First survey		Second survey	
	Number of respondents	Per cent of total	Number of respondents	Per cent of total
Econ-O-Crax substituted for other eggs	36	69.2	121	70.7
Econ-O-Crax bought in addition to other eggs	16	30.8	41	23.4
No reply	-	-	9	5.9
Total	52	100.0	171	100.0

Personal Interviews. A follow-up personal interview was made of 72 of the 121 respondents who indicated they substituted the purchase of Econ-O-Crax for other eggs in the second survey. Of those interviewed, all but one indicated they were now regular users of Econ-O-Crax eggs.

Each respondent was asked what type of eggs their purchase of Econ-O-Crax replaced. A relatively large proportion, over 44 per cent, said they now purchased Econ-O-Crax instead of Large Grade A eggs (table 9). Nearly one-fifth substituted Econ-O-Crax for Medium Grade A eggs. About 36 per cent substituted Econ-O-Crax for ungraded eggs purchased from farms and other sources.

Table 9. TYPE OF EGGS REPLACED BY THE PURCHASE OF ECON-O-CRAX
Ithaca, New York, May 1955

Type of eggs replaced	Number of respondents	Per cent of total
Graded eggs:		
Large Grade A	32	44.4
Medium Grade A	14	19.5
Ungraded eggs:		
From farms	14	19.5
From other sources	12	16.6
All types	72	100.0

Rochester Test

Two tests were conducted in Rochester, New York, during 1954 and 1955. The purpose of the first test was to determine the sales volume of cracked eggs. The second was to determine if total egg sales could be increased by offering Econ-O-Crax.

First Test

A large supermarket had tried to market cracked eggs, but had encountered several problems. The carton they used offered little protection for the eggs and many of them received further damage in the store display. If a cracked egg became a leaker, it could easily cause considerable damage to the entire display. Whenever this further damage was sustained, it was necessary for store personnel to repack the remaining eggs and clean the display.

In August 1954, the Econ-O-Crax carton was tested to determine its effectiveness and desirability in selling eggs. This carton offered more protection to the cracked eggs, thus eliminating display damage caused by leakers.

The average weekly sales of Econ-O-Crax eggs ranged from 62 to 126 dozens during the first five months of the study (table 10). During August, September, and October, this store offered frequent specials on pullet eggs. In October, November, and December, several specials were run on medium eggs. As a result, Econ-O-Crax were not the most economical buy, which held down their sales.

Table 10. AVERAGE WEEKLY SALES OF EGGS, BY MONTHS
One Supermarket, Rochester, New York,
August 1954-May 1955

Month	Type of eggs				
	Large	Medium	Pullet	Econ-O-	All
	A	A	A	Crax	eggs
	Dozens				
August	216	192	186	126	720
September	259	351	134	62	806
October	246	444	90	102	882
November	258	420	6	102	786
December	269	461	-	86	816
January	378	234	-	216	828
February	324	246	-	252	822
March	294	264	-	264	822
April	557	134	-	182	873
May	258	246	-	174	678
10 Months	310	300	42	153	805
Sales per 100 customers	7.4	7.2	1.0	3.6	19.2

From January to May, Econ-O-Crax eggs were priced at or below medium eggs. Sales increased substantially, reaching an average of 264 dozens in March. For the 10-month period, sales averaged 153 dozens weekly, and represented 19 per cent of the total egg sales.

This store was located in a relatively low income area and the customers were predominately of Italian descent. These factors combined to create a market for an economy egg.

Total egg sales remained relatively constant during the entire study, averaging 805 dozens per week for the 10-month period. This suggests that the Econ-O-Crax eggs were important in maintaining a high level of sales when other economy eggs were not available.

Second Test

A second test was conducted in two supermarkets to determine the effect of Econ-O-Crax on total egg sales. These stores were located in a relatively low income area where there appeared to be a need for an economy egg. A test versus control experimental design was used for this study. Weekly egg sales were recorded for August in both stores to establish a base for comparing sales. During September, Econ-O-Crax were offered for sale in Store 1 in addition to the regular display of eggs and Store 2 was used as the control. In October, the test and control stores were reversed with Econ-O-Crax being sold in Store 2 only.

In September, sales in the test store (Store 1) increased to 492 dozens, an increase of 22.4 per cent over August sales, the base period (table 11). During this same period, sales in the control store (Store 2) increased 18.4 per cent over the base. The difference in percentage changes was four points in favor of the store with Econ-O-Crax eggs.

Table 11. SALES OF EGGS, TEST AND CONTROL STORES
Two Supermarkets, Rochester, New York
August-October 1954

Time period	Store 1		Store 2		Difference between test and control stores
	Total	Per cent	Total	Per cent	
	egg	change	egg	change	
	sales	from base	sales	from base	
	<u>Dozens</u>	<u>Per cent</u>	<u>Dozens</u>	<u>Per cent</u>	<u>Per cent</u>
August (Base)	402	-	228	-	-
September	492	22.4	270	18.4	4.0
October	552	37.3	355	55.7	18.4

Source: Appendix, Tables 9 and 10.

When the test and control stores were reversed in October, sales in the test store (Store 2) were 55.7 per cent above the August base, while sales in the control store were 37.3 per cent above the August sales. The net increase in sales during this period was 18.4 percentage points in favor of the store with Econ-O-Crax.

Other Tests

To further measure the effect of Econ-O-Crax on total egg sales, tests were run in several supermarkets located in other New York cities. In each of these stores Econ-O-Crax were offered for the first time. A record of egg sales for one month prior to the introduction of cracked eggs was used as a base for comparing sales.

Store A

Store A customers represented, in general, the population of a manufacturing area. Weekly egg sales averaged about 6 dozens per 100 customers. Econ-O-Crax were introduced and featured as an economy buy in an attempt to improve egg sales.

Total egg sales for the base period, December 1954, averaged 114 dozens per week (table 13). When Econ-O-Crax were introduced in January, egg sales averaged 258 dozens per week or an increase of 126 per cent over the base. Average weekly egg sales for February were 308 dozens, an increase of 170 per cent over December.

Table 12.

WEEKLY EGG SALES
One Supermarket, Central New York
December 1954-February 1955

Week	Total egg sales	Econ-O-Crax sales	Per cent increase over base
	Dozens		Per cent
Nov. 29-Dec. 4	102		
Dec. 6-11	103		
Dec. 13-18	137		
Dec. 20-25	142		
Dec. 27-31	88		
Average (Base)	114	-	-
Jan. 3-8	249	135	118
Jan. 10-15	217	142	90
Jan. 17-22	258	171	126
Jan. 24-29	307	194	169
Average	258	160	126
Jan. 31-Feb. 5	440	370	286
Feb. 7-12	274	183	140
Feb. 14-19	140	115	23
Feb. 21-26	378	300	232
Average	308	242	170
2-month average	283	201	148

This shows that a store experiencing a relatively low volume of egg sales might materially increase sales by offering Econ-O-Crax. It is interesting to note that Econ-O-Crax represented nearly three-fourths of total egg sales during the study.

Store B

This store, as in the case of Store A, was experiencing relatively low egg sales, selling only 73 dozens weekly during September (table 13). Grade AA eggs had been introduced several months before this test, but the addition of a high-quality egg had failed to improve egg volume. Econ-O-Crax were placed on sale as an economy buy in an attempt to stimulate egg sales.

Table 13. WEEKLY EGG SALES
One store, Central New York,
1954

Week	Total egg sales	Econ-O-Crax sales	Per cent in- crease over base
	Dozens		Per cent
Sept. 6-11	84		
Sept. 13-18	105		
Sept. 20-25	90		
Sept. 27-Oct. 2	114		
Average (Base)	73	-	-
Oct. 4-9	216	48	196
Oct. 11-16	150	24	106
Oct. 18-23	150	72	106
Oct. 25-30	114	12	56
Average	158	39	116
Nov. 1-6	156	48	114
Nov. 8-13	132	24	81
Nov. 15-20	168	48	130
Nov. 22-27	186	24	155
Average	160	36	119
2-month average	159	38	118

In October, total egg sales increased to 158 dozens per week with cracked eggs accounting for about one-fourth of total sales. For the two-month period, total weekly sales were 118 per cent greater than September. Of the actual increase in sales, Econ-O-Crax made up about half of the total.

Store C

Store C regularly offered both white and brown eggs. Weekly egg sales were relatively high, about 18 dozens per 100 customers. Econ-O-Crax were introduced to enable the store to offer customers an economy egg, thus making a more complete line of eggs.

Egg sales during the base period, January 1955, averaged 672 dozens weekly (table 14). With the addition of Econ-O-Crax, sales increased 17 per cent in February and 11.6 per cent in March. Over the two-month period, Econ-O-Crax sales accounted for about 14 per cent of total egg sales. The actual increase in egg sales was about equal to Econ-O-Crax sales indicating that the addition of cracked eggs as an economy buy increased egg sales.

Table 14.

WEEKLY EGG SALES
One store, Central New York
January-March 1955

Week	Total egg sales	Econ-O-Crax sales	Per cent in- crease over base
		Dozens	Per cent
Jan. 3-8	864		
Jan. 10-15	432		
Jan. 17-22	1,056		
Jan. 24-29	336		
Average	672	-	-
Jan. 31-Feb. 5	672	72	0.0
Feb. 7-12	936	144	39.3
Feb. 14-19	816	144	28.3
Feb. 21-26	720	96	13.2
Average	786	144	17.0
Feb. 28-Mar. 5	792	96	24.5
Mar. 7-12	696	120	3.6
Mar. 14-19	672	48	0.0
Mar. 21-26	840	144	25.0
Average	750	102	11.6
2-month average	768	108	14.3

WHOLESALE CRACKED EGGS

Egg handlers are often confronted with the problem of marketing cracked eggs. Generally, these eggs sold at relatively low prices. The development of improved methods for wholesalers to market cracked eggs may offer an opportunity for them to increase their net returns.

Volume of Cracked Eggs

In a one-week period, June 13-18, 1955, 10,580 dozen eggs were candled by a wholesale egg buyer in Central New York (table 15). Of this total, 4.5 per cent of the eggs showed shell damage. In November, the volume of eggs candled had increased about 50 per cent (table 16). The proportion of cracked eggs remained about the same representing nearly 4 per cent of the total volume handled.

Table 15.

CANDLING YIELDS
One Wholesaler, Central New York
June 13-18, 1955

Size and grade	Candling yield	
	Dozens	Per cent of total
Extra large A	788	7.5
Large A	6,944	65.6
Medium A	1,326	12.5
Small A	726	6.9
Cracks	480	4.5
Bloods	210	2.0
Other	106	1.0
Total	10,580	100.0

Table 16.

EGGS CANDLED AND IMPORTANCE OF CRACKED EGGS
One Wholesaler, Central New York
November 1955

Week	Eggs candled	Cracked eggs	Cracked eggs as per cent of total
	Dozens		Per cent
Nov. 1-5	12,612	630	5.0
Nov. 7-12	13,825	510	3.7
Nov. 14-19	14,654	570	3.9
Nov. 21-26	17,820	510	3.0
Average	14,593	555	3.8

Price of Cracked Eggs

Cracked egg prices in alternative market outlets for this wholesaler are shown in Table 17. In June, the wholesale price of Econ-O-Crax was 44 cents per dozen compared to 28 cents for cracked eggs marketed in New York City. This represents a difference of 16 cents per dozen. This difference was not as great in November, averaging about 13 cents per dozen. There was less difference between Econ-O-Crax prices and prices of eggs sold frozen or to local bakeries than for those sold to wholesalers. Nevertheless, the difference was still important.

Table 17. WHOLESALE PRICE OF CRACKED EGGS IN VARIOUS OUTLETS
Central New York,
June and November 1955

Outlet	June ^{1/}	November ^{2/}
	<u>Cents</u>	
New York City	28.0	32.6
Frozen	38.0	44.0
Local bakeries	34.0	38.1
Econ-O-Crax	44.0	46.0

^{1/} Prices based on market of June 18, 1955.

^{2/} Average prices for four-week period in November 1955.

This price data clearly shows that egg handlers could substantially increase their net returns by developing retail outlets for cracked eggs. This is especially true if outlets for frozen and bakery eggs are limited and it is necessary to market these eggs in New York City.

SUMMARY AND CONCLUSIONS

The purpose of this study was to test a new technique for marketing cracked eggs through retail outlets. Studies were conducted in seven super-markets in New York State.

The introduction of Econ-O-Crax increased sales of eggs from 14 to 148 per cent, depending upon the volume of egg sales before Econ-O-Crax were offered for sale, the area in which the store was located, and the line of eggs offered.

Econ-O-Crax were initially priced at about 80 per cent of the Large Grade A price. However, the sale of cracked eggs was more closely associated with the price and availability of medium and small eggs than with large eggs.

These studies indicate that cracked egg sales in a retail store result from changes in customer buying habits for eggs. Some customers shifted from eggs previously purchased in the store to Econ-O-Crax eggs. Others who previously bought eggs from sources outside the store shifted to Econ-O-Crax. Still another group of customers were buying Econ-O-Crax in addition to eggs regularly purchased in the store.

In a survey, about three-fourths of the customers interviewed, reported using cracked eggs for all purposes. The remainder said they used these eggs for cooking and baking only, or for table use only. Price was the most important reason given for the purchase of Econ-O-Crax.

In a wholesale candling operation, about 4 per cent of the eggs showed shell damage. This study indicated that wholesalers could increase their returns for this portion of their eggs by marketing them as Econ-O-Crax.

By packaging only good cracked eggs and offering them in carefully-selected stores, total egg sales can be increased. At the same time, this will provide an opportunity for producers and egg handlers to realize greater returns for their cracked eggs.