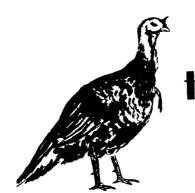


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MARKETING turkeys eggs



broilers

October 1959

OUALITY CONTROL EGG MARKETING PROGRAMS

Last month I briefly discussed a report issued by the Marketing Research Division of the U. S. D. A. concerning the study conducted by Dr. Baker on integrating egg production and marketing. This report described the development of quality egg programs and the means used to achieve the desired results.

Recently the U. S. D. A. has announced a quality control egg production and marketing plan. This plan, which became effective on September 1, 1959, sets forth certain production and management practices as well as handling practices that must be adhered to in order to sell eggs under the new "Fresh Fancy Quality" egg grade. This program permits the use of this label or the U. S. Grade AA shield on top quality eggs. Whichever grade shield is used--Fresh Fancy Quality, U. S. Grade AA or U. S. Grade A--may be accompanied by the boxed statement "Produced and Marketed Under Federal-State Quality Control Program." This new egg grading program is the result of close cooperation between industry and government.

Now let us briefly discuss some of the reasons for establishing a quality control egg production and marketing program.

Prior to quality control programs, eggs were produced and marketed under widely varying conditions. The quality of these eggs was determined subjectively. That is, it was based on the candler's interpretation of the interior quality of the eggs. Research has indicated that due to the factors of human judgment involved candlers are not consistent in their quality evaluations. The operators involved in the tests were not able to record similar results when they, unknowingly, regraded the test cases. Neither will two different candlers arrive at substantially the same interior quality grade for the same case of eggs. In addition

to their inability to separate excellent eggs from good eggs, a candler is limited to handling an average of six or seven cases of eggs per hour. As the quality within the case drops or becomes less consistent, more time is required to candle the eggs.

Research has also shown that a small sample of the eggs produced by a flock of approximately the same age is sufficient to determine their interior quality. In addition, electronic equipment has been developed to remove defective eggs such as those containing blood spots and green not.

In view of these factors, the costs of egg procurement and handling could be reduced by a quality control program which would insure uniform egg quality.

Another factor influencing the development of quality control programs is the fact that consumers have been conditioned to expect—and demand—a consistently uniform product. This demand has been evidenced by the trend toward specification buying on the part of large retail stores. This type of buying—new to agriculture but long commonplace in industry—has necessitated the production of eggs to meet these specifications.

It was reasoned by the poultry industry that a uniform type of bird managed in a stipulated manner would produce eggs of a uniformly high quality. Furthermore, if the egg handling practices both on and off the farm were as optimum as possible, this high quality could be maintained.

The third factor which supported the development of quality programs was the desire on the part of raw material suppliers (either feed or chicks) to sell their products to producers. Finally, a few programs were started in order to obtain a good return on the capital invested.

Quality control programs are designed to help the producer and the egg handler in the production and maintenance of high quality eggs. In time the conditions required by the programs will become necessary for the production of table eggs. These programs will also have an influence on the price making mechanism, for the present system does not adequately reflect the true market values for high quality eggs.

Methods of Quality Control

The specific details of the quality control requirements will vary with the situation in which the program operates as well as with the operator's ideas on how to obtain and maintain the desired quality.

Refrigeration both on and off the farm is considered an essential to maintaining egg quality. The recommended temperatures for egg holding rooms are $55-60^{\circ}$ F. with a relative humidity of approximately 70 per c \cdot t. Lower temperatures are considered undesirable since they cause the eggs to sweat during grading. Temperatures higher than 60° F. are not recommended because of quality deterioration problems.

The type of strain of bird is important. Generally, a reasonably light weight production bred strain of birds laying white eggs is recommended. These birds should lay large (24-25 ounces per dozen), high quality, strong-shelled eggs with a minimum of blood spots. Since egg quality tends to decline with age, most quality-control plans limit the ages to which birds are kept. The length of lay of high quality eggs is a variable factor that must be determined by experience. Generally, profitable egg production can be realized for a period of 10 to 15 months.

The layers must be confined and should be fed a well-balanced feed which produce relatively light-colored yolks. As is consistent with good management practices, the eggs should be gathered at least three times a day, cleaned (if necessary) in an approved manner, and promptly cooled to 55-60° F. before packing. These eggs should be either picked up at the farm or delivered to the grading plant at least twice a week--oftener if the volume warrants the additional expense.

In general, quality-control programs encourage a larger unit of production, with few plans being operated for producers with less than 500 layers. As the plans become more widespread, the minimum acceptable flock size is likely to increase to 5,000 or more layers. Currently some plans in operation have a 3,000-bird minimum, while some contract production plans permit only flocks composed of units of 2,000 hens each. Thus the producer would have to have a flock of 2, 4, 6, or 8 thousand, etc. layers.

Producers are paid a premium for adhering to the regulations laid down for the quality control program. In time, these premiums will diminish until they represent actual handling cost differences. In all cases the members of the quality-control egg marketing program are self-financed, or operate on short-term credit. Those producers who are entirely or largely financed by the marketing organization or other source are covered by contract production quality-control programs. This type of program will be discussed in the next issue.

WHEN TO SELL BROILERS

Recent research conducted by Dr. E. W. Wisman at V. P. I. indicates that with the improved genetics and nutrition of modern broiler crosses, it may be more profitable to grow the broilers to at least 10 weeks of age. Preliminary analysis of the data revealed that the least loss or maximum profit is realized at 10 weeks of age. The experiment was concluded at the end of this period because the facilities were required for other research. A more detailed report will be included in the near future.

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EGG PRICES - Average From September 1, 1959 to September 31, 1959 $\frac{1}{2}$

	U. S. Grade A			Grade B	Grade C
Market Area	Large	Medium	Small	Large	Large
		- cents per	r dozen -		
Harrisonburg	35.5	22.2	13.3	20.9	13.3
Richmond	37.5	22.1	14.2	29.2	16.4
Roanoke	3 7.6	22.1	14.2	28.6	15.5
Virginia	46.75	29.75	15.40	29.80	14.30

^{1/} Values being used in adjusting to a common denominator are: (1) Delivered to plant--0 to 1¢ (2) Cases exchanged--1¢ (3) Farm refrigeration--0 to 3½¢ (4) Minimum 5 case lots--0 to 2¢. When the conversions are completed each day, statewide prices will be comparable and both producers and egg marketing firms will have a sounder basis for buying and selling.

BROILER PRICES - Average From September 1, 1959 to September 31, 1959

Market Area	Ave. 1/ Price	Wee	kly Summary of Pur in Virginia	rchases
		Week Ending	No. Birds Purchased	Weighted Av. Price (cents)
Virginia Del-Mar-Va West Virginia North Carolina North Georgia	15.50 16.25 15.10 14.55 14.45	9/4 9/11 9/18 9/25	979,392 837,338 961,500 1,003,100	15.65 15.26 16.20 15.46
	=	Total	3,781,330	15.65

^{1/} Unweighted average.

Average Virginia Poultry Feed Prices and Feed-Price Ratio

	Price Per 100 Pounds					
		Broiler	Turkey		_	. 1/
	Laying Growing Growing			Feed-Price Ratios 1/		
Date	Mash	Mash	Mash	Egg	Broiler	Turkey
		-dollars-				
Sept. 15, 1958	4.75	5.20	5.20	13.0	3.0	6.2
Aug. 15, 1959	4.65	4.95	5.10	10.2	3.2	5.3
Sept. 15, 1959	4.55	4.85	4.90	10.8	3.2	5.5

^{1/} Number of pounds of feed equal in value to one dozen eggs, one pound of broiler live weight, or one pound of turkey live weight.



Section

October 1959

PRICE ALIGNMENT
BETWEEN MILK MARKETS

Prices paid to farmers for milk are

influenced by the distance of the market from areas of alternative supplies. That is, the price in the area of abundant supply plus the cost of transportation indicate the price at which milk could be readily secured for use in the local market. Local producers cannot expect to receive (for an extended period of time) prices much above the cost of an alternative supply of milk on a year-round basis. Nor can milk processors expect to purchase local milk for fluid use at less than what an alternative supply would cost. A local supply of milk is generally more dependable and of better quality than milk from distant areas. However, this does not eliminate the influence of alternative supplies on local prices.

The Dairy Division of the U. S. D. A. puts considerable emphasis on the alignment of prices between markets under Federal Milk Marketing Orders. H. L. Forest, Director, Dairy Division, said, in a talk at the annual meeting of Eastern Milk Producers Association, Inc., at Syracuse, N. Y., that a problem existing today in varying degrees in most Federal order milk markets

is the need for more timely alignment of prices between markets.

Alignment of prices between markets is dependent on cost of transporting milk between markets. As transportation costs change, the difference between prices in the various markets should reflect these changes. Therefore, if prices are properly aligned for a given time, the same relative prices may be completely out of line at a later period, assuming that transportation costs will change.

In establishing proper price alignments, it is first necessary to delineate the principal area of high production and low milk prices. Historically, the North Central area has been the dairy section of this country. As a result prices have been aligned using this area as the basing point. Such a practice seems economically sound.

As one moves outward from this area, fluid milk prices (Class I) have tended to increase as transportation costs increased. The average relationship of milk prices to distance has increased in recent years. In a recent study of the geographic structure of milk prices, Dr. L. F. Herrmann and Helen V. Smith of the Market Organization and Cost Branch of A.M.S.,

U. S. D. A. show changes in price relationships to distance from 1953-54 to 1957-58. The average relationship of price to distance was such that milk dealers' buying prices per hundredweight of fluid milk increased an average of 2.18 cents per 10 miles increase in distance, using Eau Claire, Wisconsin as the basing point. In other words, Class I milk prices increased an average of 21.8 cents per hundredweight for each 100 miles from Eau Claire, Wisconsin. Four years earlier (1953-54), the average was 19.2 cents per hundredweight for each 100 miles. Thus, from 1953-54 to 1957-58, the average price relationship to distance from Eau Claire, Wisconsin has increased by about 2 cents per 100 miles.

The average rate of increase in price with distance would be expected to approximate the rates for transportation plus other transfer costs, but directly relevant current data on such rates and costs are not available at this time. The rate of 19.2 cents for 100 miles in 1953-54 was found to agree approximately with information from several firms that specialized in transporting milk between markets. Many items of expense in truck operation rose substantially between 1953-54 and 1957-58. Prices of gasoline declined 2 per cent, but lubricating oil rose 24 per cent, tires and tubes 18 per cent, trucks 11 per cent, and truck repairs 11 per cent. Quantities of milk moving by rail are almost negligible but rail freight rates are of some significance as an indication of transportation costs. Rail freight rates rose about 11 per cent between 1953-54 and 1957-58. The change in average relationship of fluid milk prices to distance appears consistent with changes in items of transportation costs.

Recently, there has been much written and said about proper alignment of Class I milk prices between markets. Many in the dairy industry felt that this meant a smaller differential between prices in the various markets. The purpose here is to explain that price alignment is determined primarily by transportation costs. As these change, prices in the various markets would have to change if the same relationship of prices to distance is to be maintained. In the past four years, the price relationship to distance from Eau Claire, Wisconsin has increased rather than decreased.

MILK CONSUMPTION BY TEENAGERS Many persons in Virginia's Dairy Industry realize

that per capita comsumption of fluid milk is low in Virginia. They further realize that the best way to improve the situation in the dairy industry is by increasing the consumption of fluid milk. In the past few years milk comsumption per capita has been decreasing. Our expanding population has been solely responsible for greater total milk sales. Even though the dairy industry has carried on an extensive advertising campaign, fluid milk is still losing ground to its competitors: soft drinks, coffee, fruit juices, etc.

Most children start life as users of milk. They drink milk under parental supervision during their early years, but when they reach adolescence their consumption has begun to decline. A recent study in Pennsylvania, by M. E. John and Harrison Price, showed that consumption of milk continues to decline as children go through their teens.

Before milk consumption can be increased, we first need to know why teenagers decrease their milk consumption as they go through adolescence. We also need to determine what appeals will bring milk consumption up to daily requirements.

John and Price found that teenagers who didn't drink milk gave the following reasons for not drinking milk.

- 1. Many high school students consider milk for babies and children. At the early high school age they are attempting to "steer clear" of behavior that associates them with children.
- 2. They consider that milk adds weight; girls of this age, especially, are very weight conscious.
- 3. They feel it is not an appropriate drink to have with friends, on a date, or at social events. Young people participate more in such activities at this age than during early childhood.
- 4. They have not found milk as stinulating as other drinks.
- 5. Others their own age do not drink milk.

Adolescents of all ages understand that milk contributes to vigor, vitality and good health. Those teenagers who drink milk gave these reasons for drinking milk.

- 1. They believed that it contributes to lealth, energy, and personal appearance.
- 2. They were in the habit of drinking milk.
 - 3. They liked its taste.

The adolescent age is a critical stage for increasing milk consumption. During early childhood, milk consumption is usually under the supervision of parents. The dairy industry must find a way to have adolescents continue to drink milk. It may be an easier task to maintain per capita consumption of milk through the teens than to get adults to start to drink milk again. Once a person breaks the habit of drinking milk, it is difficult to recreate such a habit.

The obstacles for greater milk consumption by adolescents must be overcome if the dairy industry is to increase per capita consumption of fluid milk. Through education and promotion the following must be done:

- 1. Continue to stress the contribution of milk to vigor and vitality.
- 2. Oversome the feeling that milk is only for babies and children.
- 3. Emphasize that milk is not more fattening than other high calorie foods.
- 4. Decrease emphasis on the value of milk as a food for growth and stress its importance as a food needed for good health throughout life.
- 5. Stress the appropriateness of milk for situations such as a bedtime snack, on a date, at a group get-to-gether, and eating in a restaurant. Make it a drink that is desired for such activities.

These are not the only things that can be done to increase milk consumption, but if teenagers can be persuaded to continue to drink as much milk as they drank as a child we will be making progress.

Milk Marketing Specialist