Fluid Milk Price Control

dynamic industry provided with means of maintaining orderly relationships through mechanism of Bureau of Milk Control

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More than 95% of the total milk produced in California for fluid consumption is sold at prices set forth by the state. Under California law, the Bureau of Milk Control sets prices for each of 37 marketing areas and periodically audits plant records to determine that each producer has received proper payment, and that no milk is sold below the price prescribed.

At the producer level, a classified—according to use—price plan is used. Class *1* includes all milk sold as fluid milk, fluid cream, concentrated milk, flavored milk drinks, and fluid skim milk. Class *3* refers to milk used for manufacture of butter and hard cheese, and Class *2* includes all milk used in products not specified as Class *1* or Class *3* uses. Payment for usage is based on average utilization of the plant to which milk is shipped.

Because whole milk received by plants varies in fat and nonfat solids between producers and because utilization of fat and skim components of milk varies among plants, the Bureau of Milk Control now actually specifies prices for both the fat and skim in various classes.

Important considerations in setting producer prices involve not only the level of price, but also the relationship of prices between marketing areas. These intermarket price relationships serve to insure that deficit producing areas, such as San Francisco, for example, receive adequate supplies from surplus areas without, at the same time, providing incentive to drain too much milk from these areas.

Resale prices are set, by marketing areas, for retail home delivered sales, for wholesale deliveries, and for store purchases by consumers. These prices must be fixed for all container sizes and again, not only level of prices, but the relation between prices for different containers and at different points in the marketing system must be considered. In most areas, prices are also established for sales between distributors.

Until recently, prices in most market areas were set on a uniform basis, but, on January 3, 1956, changes in pricing procedures—reflecting lower unit prices to large-volume customers in line with associated savings in delivery cost—became effective in the Fresno market. For wholesale customers, there is an 8% discount on all sales over $5 per delivery. The home-delivery plan involves a reduction of 1¢ per quart in the base price, with a charge of 3¢ made for each delivery. The Fresno plan is too new to determine results, but the effort to set prices in relation to cost will bring about greater equity in milk pricing and should improve efficiency and reduce distribution costs.

Fluid milk receives special treatment in part because of its special place in the human diet. Adequate supplies of safe and wholesome milk are considered essential for the health and welfare of society.

The specific form of control applied to the fluid milk industry, however, results largely from the nature of the product and from the organization—or structure—of the industry. The fact that fluid milk is perishable and is produced and consumed every day of the year necessitates contractual relationships between buyers and sellers at all levels which—among other things—tends to lessen the degree of competition. Also, the number of producers is large relative to the number of distributors in any market which means that each individual producer—representing a very small part of the total supply of any particular distributor—is in a very weak bargaining position with respect to the price he receives for his milk. Furthermore, it is characteristic of most fluid milk markets that three or less distributors tend to dominate the market and act as price leaders both at producer and resale price levels.

Historically producers recognized the weakness of their bargaining position as individuals and—during the 1920's—voluntarily joined together into collective bargaining associations empowered to enter into price negotiation with distributors for the total supply.

The voluntary collective bargaining system broke down under the severe economic forces of the depression. In the early 1930's the industry was in a chaotic condition and efforts to correct itself repeatedly failed. The State was called upon as a last resort to use its police powers to re-create conditions of stability.

The passage of the Young Act in 1935 authorized the State, through the Director of Agriculture, to establish minimum prices to be paid producers by distributors and in 1937 the Desmond Act provided for the setting of resale prices. The earlier bargaining associations of the 1920's used a classified price system, specified payment periods, and had pooling arrangements—and all of these devices were incorporated in state control procedures. The main change brought about through control is that, previously an individual producer could withdraw from an association whenever he thought he could obtain more favorable conditions individually. Under the present arrangement—by authority of law—he cannot enter into any special arrangements with distributors.

It is impossible to directly determine what has been the impact of Milk Control. Comparisons of prices under control with prices—controlled and uncontrolled—in areas outside of California are of limited usefulness but are about the only available measure. Such comparisons seem to indicate that typical producer prices are lower in markets with federal control, higher in markets with state control—grouping California with the other 15 states—and intermediate where there is no government control. There seems to be no change in the relationship of producer prices in California

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delay both floral initiation and maturity of the fruit.

An example of this effect in delaying maturity may be seen in the graph on page 4. These data were taken from an experiment on Fordhook 242 lima beans near Santa Paula in which four successive harvests were made from the check and treated plots. At each harvest the beans were shelled into immature, mature and overmature beans on the basis of acceptability for freezing purposes. The line for the check indicates that the peak of maturity for these plants occurred at or just before the initial harvest, which took place on the 26th of August. At this time both 2,4-D treated groups had fewer green mature beans than the check. The peak yield of green mature beans came two weeks later in those plants treated with 10 ppm of 2,4-D two weeks after emergence, and it was not significantly greater than the check yield. An additional seven days were required for the plants—treated with 10 ppm of 2,4-D four weeks after emergence—to reach their maximum production of green mature beans.

The total production of these same three plots on a dry bean basis resulted in a 63% increase for the 10 ppm of 2,4-D applied two weeks after emergence and a 46% increase for 10 ppm of 2,4-D applied four weeks after emergence—both differences significant at the 5% level.

The variability encountered in the use of plant growth regulators to increase yield of beans can probably be attributed to many environmental factors, but observations made over several years indicate that one important factor is an adequate water supply at the end of the growing period. If the plants become deficient in water near the time when the fruit are normally maturing, the treated plants—delayed in maturation—are prevented from reaching their maximum size and weight. This results either in no effect on yield, or an actual decrease in spite of the larger number of pods produced. This fact was verified in experiments conducted in fields where beans were grown without irrigation during the growing season.

Under conditions of severe moisture stress in the maturing plant—brought about by periods of exceptionally warm weather and low soil moisture availability—there was usually either no effect of the hormone treatments or a reduction in yield.

Other factors which may influence the effect of growth regulators on yield are nutrient level—particularly nitrogen—and unfavorable growing conditions in the early part of the season causing a prolongation of the inactive period following the application of the growth regulator sprays.

Sprays of several growth regulators applied to pole beans in San Diego at the time of the first spring bloom resulted in as much as 58% increase in yield from the first three harvests, but at the end of the harvest period there was no longer a significant difference between the untreated and the sprayed plots. The increased early yield appeared to result from a decreased drop of flowers and small pods during a period of warm weather occurring soon after spray applications. Other treatments of the same type in this area have resulted in no effect on either the early or the total yield.

From these studies it appears possible to increase yields of dry lima beans 50% to 70% by the application of sprays of plant growth regulators in low concentrations. However, timing of the spray application and the concentration of the material used seem to be extremely critical. This is particularly true in the case of 2,4-D, where a decimal error might result in a concentration 10 times too high that could easily kill the plants and would certainly result in a greatly reduced yield.

Both lima and common beans appear to be somewhat more tolerant of some other synthetic plant growth regulators than 2,4-D, but all of these materials require higher concentrations to achieve the same effect as induced by 2,4-D.

Because of the delayed maturity aspect and the importance of maintaining adequate soil moisture and fertility throughout the maturation period, production costs are higher. Therefore, it must be determined whether the potential increase in bean yield will be of sufficient quantity to offset increased costs. The possibility of unfavorable weather conditions or other factors either eliminating the expected increase in yield or even resulting in an actual decrease from the treatment, together with the possible harmful effects from improper application, make it appear that this treatment is not to be recommended for general use in the southern California area.

At least two materials—alpha-orthochlorophenoxypropionic acid and N-meta tolylphthalamic acid—seem to offer promise in preventing premature fruit drop in beans when applied over the blossoms. While the effectiveness of this treatment—tried in San Diego County only—appears to depend on adverse conditions bringing about drop of the untreated fruit, no evidence of an over-all decrease in yield resulting from treatments has been found.

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markets to the United States average before and after the advent of control.

As far as the effect of control on resale prices in California is concerned, the price spreads are compared, because the difference between farm and customer prices represents the return for distributor services. Based on existing spreads during January 1956 and on the average, the home-delivered price spreads were narrower in California than in 137 U. S. markets by 1¢ per quart, while wholesale price spreads were narrower in California than in other markets by 1.2¢ per quart, but price spreads to cover store operations were wider in California than the average in the other 47 states by 0.3¢ per quart. Store differentials—the difference between home-delivery and store prices to consumers—are lower in California by 0.1¢ per quart. There seem to be indications that resale price control has tended to retard some innovations, such as the use of multiunit containers with lower prices, the development of volume discounts, and relatively large store differentials. These inflexibilities are also observed in many uncontrolled markets, however, and volume pricing programs are beginning to be adopted in some California markets.

The major impact of milk control has probably not been to increase prices to distributors and consumers but seems to be in terms of stability and certainty. Farmers know they will receive payment for milk according to well-defined procedures and distributors know they are on equal grounds with their competitors.

Perhaps the most important element of stability is that the Bureau of Milk Control provides a mechanism through which orderly relationships have been maintained. The dairy industry is highly dynamic. It affects a great number of people, and it has large economic significance. Through control procedures, conflicts of interest are solved without resorting to the more violent types of controversy, such as price wars and milk strikes.

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