Why are Grade-A Surveys Necessary?

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ABSTRACT

Evaluation of large milk processing plants has brought about the need for interstate shipments of raw and processed milk throughout the United States. Uniform procedures developed under the Interstate Milk Shipment Conference have brought about uniform standards and inspection programs. This uniformity has improved the quality of milk and eliminated the duplication of inspections through the practice of reciprocity between states.

Some individuals feel the Grade A milk supply in the United States is over-regulated. To some extent, I can agree with them. However, when we look back a few years we see a tremendous change in the marketing trends and consumer acceptance for Grade A milk and milk products. First, no food surpasses milk as a single source of those dietary elements needed for proper health—especially by our children and senior citizens (1). Second, milk is a potential disease carrier, to say nothing of the potential for milk to become contaminated with pesticides, antibiotics and other adulterants.

Before 1938 milk accounted for over 25% of all disease outbreaks caused by food and water. Today the incidence of milkborne illness has been reduced to less than 1% of all foodborne disease outbreaks (2).

Before World War II, individual communities were, by-and-large, responsible for their own milk supply. Most cities of any size had at least one milk bottling plant and most all of the raw milk purchased by these plants traveled relatively short distances. It was common for milk produced one day to be hauled to the plant that same day or early the next morning. Most plants processed the milk the same day it was received and home delivery put this same milk on the doorstep or in the ice box many times within 24 to 36 h after milking. Very little milk moved from one county to another much less from state to state.

Closing of many small bottling plants brought about the need to move milk (raw and processed) long distances from the point of production to the processor and on to the consumer. Milk company representatives will tell you today that a minimum of a 10-day shelf-life is needed to furnish the public a safe, wholesome product with an acceptable flavor. Many companies process milk with a much longer shelf-life.

CHANGES CAUSED BY MOVEMENT OF MILK

This movement of milk intra- as well as interstate brought about many changes in the operation of regulatory programs. No longer were milk producers and processors being regulated by an inspection agency in the county or city in which they lived and worked, but other counties and states were becoming involved as they were now receiving this milk into their jurisdiction.

As processing plants became larger, they covered more and more territory with their sales. This involved many more regulatory agencies and soon milk inspectors were crossing not only county lines but state boundaries as well. Some areas of the country had very stringent inspection laws and others had virtually none. In any event a lot of duplication of inspections was taking place (Fig. 1, Fig. 2).

Figure 1. Out-of-State Inspections in Kentucky before 1972.

Figure 2. Local Health Department Inspections Areas before 1972.

To provide assistance to states, the Food and Drug Administration developed and published a Standard Milk Ordinance in 1924. An accompanying code was published in 1927. This Pasteurized Milk Ordinance and Code was for state adoption (3). (This differs from the Federal Food, Drug and Cosmetic Act which is Federal law administered by Federal people.)
A few states did adopt this early Pasteurized Milk Ordinance; however, uniform inspection which allowed for the free movement of milk was not developing rapidly. Much of the milk moving from state-to-state was of unknown or questionable quality and this pointed to the need for a national program which would regulate the nation’s milk supply on a uniform basis and allow free movement of milk between municipalities and states. In 1950, at the request of the Association of State and Territorial Health Officers, the Surgeon General called a National Conference on Interstate Milk Shipments to discuss the problems of duplication of inspections, lack of uniformity and difficulty of moving milk interstate.

The conference developed a plan, utilizing a cooperative State/Federal approach for evaluation of the sanitation compliance status of milk supplies of interstate milk shippers and for dissemination of such information between states. This first conference was attended by representatives of industry, state health and state agriculture departments of 22 states and the District of Columbia (4). Several basic agreements came out of this first conference:

1. The PHS Pasteurized Milk Ordinance or it's equivalent would be used by participating states as the basic milk sanitation standard.
2. PHS rating methods would be used as the procedure for determining the degree of compliance with the basic standard.
3. Only those milk supplies which were under full-time supervision of a regulatory agency should be eligible for certification under the program.
4. Supplies would be rated by milk sanitation rating officers of the state in which the supply is located. These rating officers would be standardized by the PHS and issued a certification certificate.
5. The state rating agency would report all survey results to the federal agency for publication on an Interstate Milk Shippers List, which would be available on a quarterly basis to all regulatory agencies through the United States.
6. No shipper's rating would be published without his written permission.
7. PHS/FDA would monitor the rating system and do check rating to insure that all state rating agencies were conducting the required ratings according to established procedures.

Since the 1950 Conference 15 additional conferences have been held. The 17th conference will be in Louisville in May of 1979. Many modifications have been made since the first conference; however, the basic agreements still are in effect. Since 1950, the Interstate Milk Shippers (IMS) program has grown to include participation by 49 states and the District of Columbia. (Hawaii is the only state not participating in the program.) As of January 1, 1979, there were 1,975 listed shippers, representing approximately 155,000 Grade A producers.

The cooperative program for certification of Interstate Milk Shippers continues to expand, not only by the continued increase each quarter in the number of shippers participating, but also in terms of national interest and acceptance. The Veterans Administration has used the program to purchase milk and milk products for its hospitals throughout the country. Since July 1, 1966, only milk from sources which are approved under this program has been served on interstate carriers (airlines, ships, etc.). Recently the Department of Defense drafted specifications to use the program in its joint regulations for purchase of fresh whole milk. Public health service hospitals, Indian hospitals and schools under Federal specifications now use the program.

The program has improved the sanitary quality of milk being shipped in interstate commerce; it has stimulated a high degree of uniformity in the interpretation and application of sanitary standards between states; it has improved milk laboratory control methodology and it has eliminated the need for the costly and wasteful practice of multiple inspections for two or more states on single sources of milk.

With adoption by the Kentucky Legislature of the 1972 Kentucky Milk and Milk Products Act and the requirements of this act, no outside state agency presently comes into Kentucky to inspect milk plants or producers' dairies and we do not travel outside of Kentucky. Presently, through the cooperation of states in the IMS program, Kentucky milk moves into many states with little difficulty. With Kentucky being a shipping state, that is, we produce more milk than we consume, it is very important to dairy farmers in this state that their cooperatives and plants can move milk into areas where the milk can be sold as Class 1. Kentucky enjoys a good national reputation for production of good quality milk.

**CERTIFICATION PROGRAM**

Briefly, the program for certification of plants and producers for the IMS Program is as follows. In addition to the routine inspection program, each milkshed is surveyed or evaluated once every 14 to 18 months. A milkshed is a group of dairy farms producing milk in a given area or attached to specific milk plant, receiving or transfer station. Each group of producers in a milkshed and the plant, transfer or receiving station is assigned a rating based on the findings during the survey. The evaluation or survey of a milkshed consists of:

1. Selection of a statistical number of producers for inspection.
2. Assigning of a rating score to each producer inspected based on the violations found at the time of the inspection. Each item on the inspection sheet is assigned a numerical score. Violations may range from 10 to 1 point, depending on the seriousness and public health significance of the violation.

(Cleaning of Equipment - 10; Water Supplies and Toilet Facilities - 5; Cleanliness of Milkhouse - 3; Cleanliness of Milking Area and Cowyard - 2; and...
Walls and Ceilings, Lighting Feed Storage and Etc. - 1 point)
3. The producer’s quality record for the past year is also reviewed. Failure to meet quality standards also affects the rating assigned the producer.
4. The survey officer reviews the enforcement program being carried out by the inspector. In other words, the inspector assigned to the area is also being surveyed or checked to determine if he is carrying out the requirements of the regulation regarding inspection frequency, issuance of notices when required and suspension of producers not meeting requirements.
5. Scores of all producers inspected during the survey are averaged together. The average rating for the milkshed must be 90% or above to be approved for interstate milk shipment.
6. Plants and receiving and transfer stations are also assigned a rating in much the same way as producers. They must also maintain a 90% rating or above.

Milk from milksheds which fail to maintain a 90% sanitation and enforcement rating may not be received by plants which sell milk and milk products in interstate commerce. In Kentucky this includes practically all pasteurization plants.

Even though surveys require a few more inspections for those producers who are selected on the survey, the benefits from the survey ratings are for the producer. Without an approved rating, his milk could not move into interstate commerce. Also, without a rating procedure and an organization such as the Interstate Milk Shippers Conference, movement of milk between states would not be permitted unless those states receiving the milk sent their inspectors to evaluate the supply. In the past, when some of this was done, many of the receiving states charged the dairy industry for these inspections. Also, in some areas requirements were established which made it virtually impossible for milk to move into that state when the milk was not produced within the state.

Recently Smathers stated: “A dairy farmer who is consistently above 90 always is a welcome member in a milk supply” (5). This is certainly true. Not only does failure by an individual producer to meet the Grade A requirements affect his milk, but it may also affect that of other producers and the producer association. This is in addition to the money lost by the producer because of high somatic cell counts which lower production and cause milk to be diverted to Class II and III markets or cause milk to be disposed of because it is adulterated or is below the quality standards.

In closing, we can provide an answer to the question, “Why are Grade A surveys necessary?” Surveys not only have proven by past history to improve the overall quality of the nation’s milk supply, but they have benefitted the dairy farmer tremendously by allowing free movement of milk and milk products throughout the United States.

REFERENCES

Gordon, Morris and Packard, cont’d from p. 64