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SANITARY REGULATION--ONCE? TWICE? THRICE?

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Those in the dairy industry are quite conscious of the fact that practices they designed to help accomplish a desirable goal may later become quite burdensome and restrictive. Technology changes our ability to do certain tasks and to produce certain products. We change our way of looking at problems--even changing the problems themselves.

The problem we are considering did not just happen. There were very definite reasons for travelling the road we have gone in sanitary regulation. (And there are very definite reasons for travelling on a high-speed highway at the present time). The practices used by the dairy industry have served us well. Forty years ago when health authorities and the dairy industry first began developing widespread regulations regarding sanitation requirements the truly pressing problem was how to achieve a safe and sanitary milk supply. Debate waxed hot over whether or not to make pasteurization compulsory. There was much difference of opinion as to what kind of sanitary requirements should be met by farmers.

During this phase the problem of duplication in sanitary regulation and inspection was not serious. Extending effective sanitation regulation and inspection to cover a larger part of the supply was of greater concern than was duplication. Most plants procured and distributed milk over a very limited area. Generally, the supply and distribution areas were pretty much the same territory, with the supply area for cities being the larger. The amount of milk processed in one local jurisdiction and sold in another was only a small part of the total.

Twenty years ago the problem had changed. Refrigerated trucks and improved technology had made it feasible to move large quantities of milk to quite distant markets. Producers and milk marketing agencies were seeking ways to move milk from surplus, low-priced areas to higher priced markets, either on a regular or supplementary basis. Many of these markets, however, attempted to "protect" the local supply and their control over that supply by erecting barriers to the "importation" of milk from outside the local area. Local health ordinances were a popular way of accomplishing this purpose. Many local health ordinances required that milk be pasteurized within the city limits or within a certain distance. Some required certain type structures and equipment. Some required that all farms and plant facilities be inspected by local health authorities.

These barriers were made more effective by similar "protective" provisions and administration of regulations governing the supply of raw milk. The cost of these inspections (and permits) tended to make movement of milk to many markets uneconomical.

Economies of scale in processing further stimulated the desire to expand the volumes handled at each step. The combined pressures on the distribution and supply sides were exerting the dual influence of (1) local groups seeking to protect "their" local market and (2) outside groups seeking to move more milk into those markets. Duplicating and contradicting sanitation regulations were prevalent. As a means of limiting the flow of milk between market areas this was the "heyday" for sanitation regulations. However, in evaluating their impact, one must remember that such limitations are not very effective unless accepted by the industry, regulating agencies, and the public. In this case, not only were they accepted, but generally were considered desirable by local community residents.

Ten years ago, most of the prohibitions on importation of milk had been struck down by the courts, although a few still exist--waiting only for a challenge in the courts. Progress had been made in achieving reciprocity through the adoption of the U.S. Public Health Service Model milk ordinances and the Interstate Milk Shippers program. But the problem of duplication in inspections and regulations was becoming acute.

Today, we find that substantial progress has been made on all of these fronts. In fact, progress undoubtedly has been greater than commonly believed. A few States have adopted legislation which vests the authority for sanitary regulation of milk plants and milk supplies entirely in a State agency. This, of course, eliminates duplicate regulation and inspection within the State. Reciprocity between sanitation authorities is increasingly observed, but a substantial problem still exists. Duplicate sanitary regulation and inspection costs the dairy industry--milk processors and distributors, farmers, and cooperatives--perhaps $1 million a year. In addition, substantial amounts of tax funds are expended to support duplicate regulation and inspection.

In the hope that this problem can be eliminated in the next decade, the Economic Research Service of the Department of Agriculture, in cooperation with the Milk Industry Foundation, has made a study to determine the costs of such duplicate regulation and inspection. This is a preliminary report on that study.

The basic premise of this study is that duplicate regulation and inspection are--or should be--unnecessary. The primary sanitation authority for each plant--whether it be city, county, or State--should perform an adequate regulatory job so that all other jurisdictions can accept its inspection as ensuring a safe and sanitary supply of fluid milk products.

The Study

To obtain information on the total costs of sanitary regulation of the fluid milk business in the United States, we surveyed all of the commercial fluid milk plants in the country by mail. We received and summarized replies from 1,249 fluid milk bottling plants--39 percent of the estimated 3,200 bottling plants in the United States. The 35.8 billion pounds of milk received by these plants was 46.9 percent of the fluid grade milk sold to plants and dealers throughout the country in 1967. Thus, average receipts of these plants were about 20 percent higher than the average for all plants in the country. In other words, we received replies from a higher percentage of the large plants than of the small plants. The average receipts of plants in the survey were 28.7 million pounds in 1967, compared to 23.8 million pounds for all plants in the United States.

We compared milk receipts reported by the 1,249 plants in each region with the total fluid grade milk sold to plants and dealers in the region. Reported data were then expanded by this ratio to estimate the regional totals. The same ratio was applied to each State within a region.

Sanitation Regulation and Entry into New Markets

Nearly one-tenth of the plants reported sanitation regulations which prevented or discouraged them from entering specific market areas. Plant and equipment requirements and high permit fees were the two most often mentioned as barriers sufficient to prevent these plants from selling milk in other markets.

Plants also reported difficulty in entering new markets during the past five years because of sanitation requirements. Such difficulty was more pronounced when entering a market in another State. These plant managers rated difficulties encountered in such markets as moderate or major in degree. Delays in obtaining permits were also mentioned as a problem by several managers.

Plant Regulation and Inspection

Fluid milk plants in the study were regulated by an average of 4.8 sanitation authorities--the primary authority and 3.8 "other authorities." Primary authorities were about evenly divided between city, county, and State jurisdictions. City authorities were the most numerous among "other authorities" and apparently it was with these agencies that most difficulty was experienced in obtaining sanitation authority permits.

Plants reported a great difference in the frequency of inspection by sanitation authorities. About one-third were inspected only once each month, and another one-third no more than twice. A small number were inspected a maximum of 10 to 35 times during a single month.

Plants were inspected about three times as often by primary authorities as they were by other authorities. They were inspected more often by authorities charging fees than by authorities which did not charge fees. The ratio of inspections was about the same as the ratio of fee-charging to non-fee-charging authorities. The 1,249 plants were each inspected an average of twice per month.

Plants answering the survey reported paying an average of $1,134 to primary authorities and $174 to others--a total of $1,308 per plant. Individual plants paid fees ranging up to $85,000 to various sanitation authorities, although four out of five plants paid less than $1,000 in fees. Plants in one State paid fees equivalent to 2.8¢ per cwt. of milk received.

Based upon the costs reported by the 1,249 plants, all fluid milk plants throughout the country paid an estimated $3.4 million plant fees in 1967. An additional $500,000 was expended for employee time spent with inspectors and other costs associated with plant inspections. About $2.9 million of the plant fees were paid to primary authorities and the remaining $500,000 paid to other authorities. About $300,000 of the associated costs were for primary authorities and $200,000 for others.

Fluid milk plants paid an estimated $4.5 million for sanitary regulation in 1967. Total cost for primary regulation was $3.3 million and $0.6 million for other authorities. In addition, plants paid about $33 thousand sanitation fees on milk received from other plants and over one-half million dollars in producer fees.

What's ahead?

The fluid milk industry is incurring almost one-half million dollars in "duplicate" inspection and regulation fees and nearly a sixth of $1 million in personnel and other costs connected with these inspections. "Duplicate" farm inspection costs bring the total of these "duplicate" regulation costs into the area of $1 million per year. As milk plants widen their effective procurement and distribution areas, these costs and the difficulties encountered may become more onerous unless we recognize the principle of a single sanitation authority for each plant.

Tables Showing Plants, Milk Receipts, Sanitary Authorities, Inspections, and Costs

The following tables provide a more comprehensive view of the relationships we have been considering. These preliminary data summarize the information given by the 1,249 fluid milk plants in the survey. Costs reported by these plants were expanded proportional to their milk receipts as compared with the total fluid grade milk sold to plants and dealers in each region.

Table 1.--New markets entered by the plants during the five year period of 1963-67 and difficulty of entry as reported by plants by region

Market location and entry difficulty	Breakdown of replies by region: New England	Mid-Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	Total
	Number	Number	Number	Number	Number	Number	Number	Number
Number of new markets entered 1963-67:								
Intrastate	58	96	70	41	34	55	31	385
Interstate	10	38	15	10	21	10	5	109
Total	68	134	85	51	55	65	36	494
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Degree of difficulty of entry because of sanitation regulations:								
Intrastate								
Negligible	98.3	82.3	80.0	68.3	97.1	60.0	96.8	82.1
Moderate	1.7	14.6	18.6	17.1	---	7.3	---	10.1
Major	---	3.1	1.4	14.6	2.9	32.7	3.2	7.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Interstate								
Negligible	80.0	60.5	33.3	70.0	42.9	30.0	40.0	52.3
Moderate	20.0	29.0	40.0	20.0	23.8	20.0	40.0	27.5
Major	---	10.5	26.7	10.0	33.3	50.0	20.0	20.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Plants reporting as a percent of plants in survey	13.5	11.6	14.8	15.7	19.1	14.1	8.7	13.5

Table 2.--Sanitation barriers that prevented or discouraged plant managers from selling milk in other markets, 1967

Kind of barrier 1/	Percentage breakdown of barriers reported by region: New England	Mid-Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	Total	
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Number
Plant sanitation, plant construction or equipment	11.1	51.7	22.2	14.8	31.6	4.5	12.5	23.9	38
Carton, labeling, and dating requirements	22.2	10.3	6.7	---	10.5	22.7	12.5	10.1	16
High permit fees	---	10.3	8.9	44.4	10.5	27.3	---	17.0	27
Did not recognize Interstate Milk Shippers certification	---	---	22.2	7.4	---	---	---	7.5	12
High plant inspection cost	---	---	13.3	7.4	---	4.6	---	5.7	9
High farm inspection cost	---	3.4	13.3	3.7	---	9.1	12.5	6.9	11
Farm construction and sanitation requirements	---	10.3	---	---	21.1	4.5	12.5	5.7	9
Raw milk bacterial count	---	---	2.2	3.7	---	---	---	1.3	2
Unwilling to inspect plant	---	10.3	---	3.7	---	---	---	2.5	4
Difference in butterfat content	22.2	---	4.4	7.4	5.3	4.6	12.5	5.7	9
Location of processing	---	---	---	---	21.1	4.5	---	3.1	5
Brucellosis testing	---	---	---	3.7	---	---	12.5	1.3	2
Barrier not specified	22.2	3.4	6.7	3.7	---	18.2	25.0	8.2	13
Other	22.2	---	---	---	---	---	---	1.3	2
Total 2/	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	159
Plants reporting as percent of plants in survey	6.8	7.9	9.7	14.3	12.3	13.5	4.0	9.4	

1/ Not all barriers listed are exclusively sanitation barriers.
2/ Totals may not equal sum of parts because of rounding.

Table 3.--Primary and other sanitation authorities regulating plants by type: Percentage breakdown by type authority, 1967

Region	Primary authorities by type			Total number authorities per plant 1/	Other authorities by type				Total other authorities
	City	County	State		City	County	State	Federal	
	Percent	Percent	Percent	Number	Percent	Percent	Percent	Percent	Percent
New England	24.2	0.8	75.0	8.1	80.3	0.7	15.4	3.6	100.0
Mid-Atlantic	26.5	32.0	41.5	6.4	75.9	7.3	13.6	3.2	100.0
East North Central	47.0	14.5	38.5	3.8	56.2	4.4	30.4	9.0	100.0
West North Central	50.0	13.0	37.0	4.6	48.6	4.6	30.5	16.3	100.0
South Atlantic	18.0	52.3	29.7	3.5	11.4	9.8	50.2	28.6	100.0
South Central	31.2	57.8	11.0	5.3	51.4	8.4	22.6	17.6	100.0
Western	12.4	61.3	26.3	2.4	12.5	8.5	40.2	38.8	100.0
Total	30.2	33.3	36.5	4.8	59.3	5.9	23.4	11.4	100.0

1/ Each plant is regulated by one primary sanitation authority; additional authorities are classified as "other sanitation authorities."

Table 4.--Maximum frequency of inspection during a month reported by plants in survey, 1967

Maximum number of plant inspections during any one month	Percentage distribution of plants by frequency of inspection by region: New England	Mid-Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	Total
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1	44.3	61.2	38.7	33.8	16.3	13.4	22.3	35.6
2	28.2	21.5	32.8	38.9	40.3	35.0	31.8	31.4
3	16.8	8.4	12.8	18.0	23.2	23.0	16.2	15.7
4	2.3	2.9	5.5	4.3	7.0	7.0	9.6	5.5
5	3.1	2.2	5.5	2.2	3.1	7.0	8.1	4.5
6	1.5	1.5	.4	1.4	1.5	2.6	3.5	1.7
7	1.5	---	.4	.7	.8	3.2	3.5	1.4
8	1.5	---	.4	---	1.5	1.3	2.0	.9
9	---	.4	.9	---	.8	---	---	.3
10-14	.8	1.1	1.3	---	1.5	3.1	2.0	1.4
15-19	---	.4	.9	---	1.6	1.9	.5	.7
20-24	---	.4	.4	.7	.8	1.9	.5	.6
25-29	---	---	---	---	---	.6	---	.1
30-35	---	---	---	---	1.6	---	---	.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.--Plant inspections by sanitation authorities reported by 1,249 fluid milk plants: Average number inspections by authorities charging fees and not charging fees and by primary and by other authorities, 1967

Region	Average number plant inspections by:			Average number plant inspections by:		
	Authorities charging fees	Authorities not charging fees	Total	Primary authorities	Other authorities	Total
	Number	Number	Number	Number	Number	Number
New England	11.7	7.5	19.2	12.6	6.6	19.2
Mid-Atlantic	7.4	6.6	14.0	10.1	3.9	14.0
East North Central	18.9	3.6	22.5	18.8	3.7	22.5
West North Central	15.7	3.9	19.6	14.8	4.8	19.6
South Atlantic	17.6	17.7	35.3	21.5	13.8	35.3
South Central	17.3	18.5	35.8	27.0	8.8	35.8
Western	17.5	11.1	28.6	22.8	5.8	28.6
Total	14.8	9.1	23.9	17.8	6.1	23.9

Table 6.--Average number of sanitation authorities charging fees, fees as reported paid by 1,249 fluid milk plants to primary and other sanitation authorities, and average fees paid by region, 1967

Region	Primary sanitation authorities				Other sanitation authorities				Total fees paid to all authorities	Average fees paid per plant to:		
	Average number per plant			Total fees paid to primary authorities	Average number per plant			Total fees paid to other authorities		Primary authorities	Other authorities	Total
	Charging fees	Not charging fees	Total		Charging fees	Not charging fees	Total					
	Number	Number	Number	Dollars	Number	Number	Number	Dollars	Dollars	Dollars	Dollars	Dollars
New England	0.6	0.4	1.0	1,689	6.5	0.6	7.1	2,186	3,875	13	17	30
Mid-Atlantic	.4	.6	1.0	40,519	4.7	.7	5.4	36,300	76,819	149	133	282
East North Central	.8	.2	1.0	453,642	2.3	.5	2.8	41,713	495,355	1,930	178	2,108
West North Central	.9	.1	1.0	353,171	2.6	1.0	3.6	62,712	415,883	2,541	451	2,992
South Atlantic	.5	.5	1.0	20,372	.7	1.8	2.5	11,030	31,402	158	85	243
South Central	.5	.5	1.0	365,516	2.8	1.5	4.3	51,831	417,347	2,389	339	2,728
Western	.7	.3	1.0	181,415	.6	.8	1.4	12,111	193,526	945	63	1,008
Total	.6	.4	1.0	1,416,324	2.9	.9	3.8	217,883	1,634,207	1,134	174	1,308

Table 7.--Variation among plants in total plant fees reported paid to sanitation authorities, 1967

Range in fees paid	Percentage distribution of plants by region: New England	Mid-Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	Total
Dollars	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
0 - 999	100.0	93.0	73.5	70.5	95.3	66.0	85.0	83.3
1,000 - 1,999	---	4.0	7.2	8.6	.8	7.8	5.7	5.1
2,000 - 2,999	---	.7	1.3	---	---	7.8	1.0	1.5
3,000 - 3,999	---	.7	4.3	2.2	2.3	3.3	1.6	2.1
4,000 - 4,999	---	.4	4.3	3.6	---	2.0	.5	1.6
5,000 - 5,999	---	.4	1.3	1.4	---	1.3	---	.6
6,000 - 6,999	---	.4	---	1.4	---	.6	1.0	.5
7,000 - 7,999	---	.4	1.7	2.2	.8	---	---	.7
8,000 - 8,999	---	---	---	.7	.8	.6	---	.2
9,000 - 9,999	---	---	---	2.2	---	.6	.5	.4
10,000 - 19,999	---	---	3.8	4.4	---	7.9	4.7	2.9
20,000 - 39,999	---	---	2.2	1.4	---	1.4	---	.7
40,000 - 85,999	---	---	.4	1.4	---	.7	---	.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 8.--Estimated total costs paid by fluid milk plants for sanitary regulation, 1967 1/

Fees and other costs	New England	Mid-Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	Total
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Plant fees paid to:								
Primary authorities	3,688	115,734	983,705	724,030	31,228	692,119	365,049	2,915,553
Other authorities	4,773	103,685	90,452	128,565	16,907	98,144	24,370	466,896
Subtotal	8,461	219,419	1,074,157	852,595	48,135	790,263	389,419	3,382,449
Estimated additional cost for plant inspections: 2/								
Primary authorities	16,333	108,126	82,751	22,871	20,965	44,686	47,716	343,448
Other authorities	10,661	68,592	18,230	9,012	20,485	19,146	23,614	169,740
Subtotal	26,994	176,718	100,981	31,883	41,450	63,832	71,330	513,188
Total cost for plant fees and additional for inspections:								
Primary authorities	20,021	223,860	1,066,456	746,901	52,193	736,805	412,765	3,259,001
Other authorities	15,434	172,277	108,682	137,577	37,392	117,290	47,984	636,636
Subtotal	35,455	396,137	1,175,138	884,478	89,585	854,095	460,749	3,895,637
Sanitation fees paid on milk obtained from other plants	---	23,461	355	1,296	251	4,322	3,012	32,697
Producer fees paid by plants	472	211,828	76,427	28,873	955	365	209,431	528,351
Total	35,927	631,426	1,251,920	914,647	90,791	858,782	673,192	4,456,685

1/ Regional totals were estimated by multiplying costs for 1,249 plants in the survey by a factor proportional to their share of total sales of fluid grade milk to plants and dealers in each region.

2/ Includes estimated costs to plants for employee time spent in accompanying or assisting plant inspectors; transportation, meals, and lodging cost for inspectors; and other miscellaneous costs associated with plant inspections.