

ABNORMAL MILK PROGRAM

By: J.B. Strickland

The control of abnormal milk sales idea was introduced in Florida in 1967 at the Interstate Milk Shippers Conference in Miami. Resolutions were passed by the group, to recommend to the U.S. Public Health Service the implementation of an abnormal milk program. Today a three phase program has been generally accepted by a number of dairy associations, health departments, and regulatory agencies throughout the United States and its reported effectiveness range from a mere nothing to complete control of poor quality milk.

The main objective of the program is the elimination of milk produced by sick cows - cows with mastitis - from the saleable supply. The first year was designated as the educational phase, a period in which the dairyman would be advised on abnormal milk and regulatory agencies would select a screening test suitable for their section of the country. The U.S. Public Health Service recommended the adoption of any one to the five chemical tests then available as a screening test. These were the California Mastitis Test, The Catalase Test, the Milk Quality Test, the Wisconsin Mastitis Test, and the Modified Whiteside Test. All of these concoctions react chemically when mixed with milk containing certain cells that are considered abnormal. This of course has made the leucocyte, the epithelium cell, and the term somatic cell count popular in identifying milk to be withheld from the market.

The second phase of the recommended program went into effect July 1, 1968, with a cell count in excess of 1,500,000 considered as abnormal, and most organizations have selected a screening test that will be used in their immediate area.

Florida along with a majority of states has selected the WMT and letters advising the dairyman when samples collected at his farm exceed the allowable 1,500,000 have been mailed by the Dairy Division of the Department of Agriculture and Consumer Services for about two years. Since July 1, 1969, 172 dairymen have been notified of excessive counts and 99 of these have received two or more letters.

The punitive action stage of the program is yet to come. Beginning July 1, 1970 the letters of advice will be followed by letters of warning, and repeated violations will remove infected milk from the Grade A Market.

The U.S. Public Health Service has offered the following guidelines for implementation of phase three of the Interstate Shippers Recommendation. "When a herd milk sample exceeds 1,500,000 when using the WMT, a confirmatory count using a Direct Microscopic or Electronic Somatic Cell Counter shall be made on the sample and the results of this count shall be official results.

Whenever the confirmatory count indicates the presence of greater than 1,500,000 somatic cells per ml. of milk the following procedure shall be followed:

- A. A notice shall be sent to the producer warning him of the excessive somatic cell count. The notice should also list the more likely causes of high somatic cell counts.
- B. Whenever two of the last four consecutive somatic cell counts exceed 1,500,000 cells per ml., the health authority shall send a written notice thereof to the person concerned. This notice shall be in effect so long as two of the last four consecutive samples exceed 1,500,000 somatic cells per ml. In addition to the written notice and inspection should be made by the regulatory agency or by certified personnel. This inspection should be made at milking time to be most effective.
- C. An additional milk sample shall be taken within 14 days of the written notice and inspection required, but not before the lapse of three (3) days. If three of the last five samples within any consecutive six (6) months indicate a confirmatory count greater than 1,500,000 somatic cells per ml., the milk regulatory agency shall proceed with its responsibility to suspend the dairyman's permit for violation of item 1r or other applicable requirements of the Grade "A" Pasteurized Milk Ordinance."

Item 1r of the Grade "A" Pasteurized Milk Ordinance reads as follows:

"Cows which show evidence of the secretion of abnormal milk in one or more quarters based upon bacteriological, chemical, or physical examination, shall be milked last or with separate equipment, and the milk shall be discarded. Cows treated with or cows which have consumed chemical, medicinal or radioactive agents which are capable of being secreted in the milk and which, in the judgement of the health authority, may be deleterious to human health, shall be milked last or with separate equipment, and the milk disposed of as the health authority may direct."

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SUMMARY

Nowhere in Florida Statute 502, nor in the U.S. Public Health Ordinance is mention made of a normal figure for leucocytes or a somatic cell count. When meetings were being conducted over the United States in an attempt to establish a normal, suggested tolerance ranged from 250,000 per ml. of milk to 2,000,000 and above. After much discussion and a very close vote - 1,500,000 was adopted as tolerable at the Denver Interstate Milk Shippers Conference in May, 1960, and recommended to the U.S. Public Health Service as the number to be used in administering punitive action when the phase three portion of the program goes into effect July 1, 1970. The Interstate Milk Shippers have no enforcement powers; however, if a dairy fails to meet their recommended standards his name will be left off the Interstate Milk Shippers' list of sanitary compliance and enforcement ratings. When a certain per cent of producers fail to make the list the processor who buys the milk will be removed from the list. Then milk processed by this company cannot be sold to military installations, schools, nor shipped across state lines. Therefore, as it stands now, all producers must strive to attain listing on the shippers' list.

When dealing with herds that produce large quantities of milk daily, care must be taken to assure equal effective testing programs that will not unduly penalize the producer and at the same time assure the consumer of a high quality milk at the market. To accomplish this, and at the same time keep dairy herds in the State eligible for Interstate Milk Shippers' listing, the Division of Dairy Industry will follow the U.S. Public Health Guidelines by starting each dairy in the State on a three out of five testing program July 1, 1970. All sample results recorded prior to July 1, 1970, will be discarded.

To avoid oversampling, it has been agreed by the Department of Agriculture and Health Department that all samples collected within a two week period will be averaged together and recorded in the ledger as one sample. Therefore, it should not be possible to place a dairy herd in jeopardy within less than a

three months period. This three month period should give any producer ample time to remove causes of high leucocytes, thereby, bringing his operation well into the 1,500,000 allowable limit.