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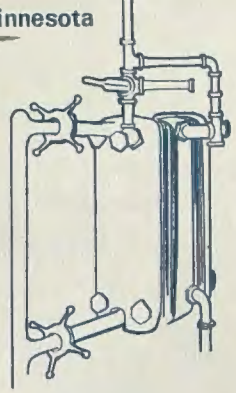
MINNESOTA DAIRY PRODUCTS PROCESSOR



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October 1976 No. 64

On September 7, 1976, the USDA issued a memorandum to "Dairy Manufacturing Plants: (those processing manufacturing milk products) regarding establishment of a nationwide abnormal milk control program. A few pertinent facts, as best we are able to determine them, follow regarding this effort.

TIMETABLE

The timetable events follows:

1. July 1, 1977 -- plants receiving milk from producers must be running one of several screening tests on these milk supplies and be prepared to do follow up work.
2. July 1, 1978 -- plants must be running at least four screening tests each six-month periods and, as necessary, confirmatory tests; plants must also be prepared to send warning letters to dairy farmers found to have counts in excess of 1,500,000 and to carry out follow up work.
3. July 1, 1980 -- program in full effect; finding of two of the last four cell counts in excess of 1,500,000 requires notification of the state regulatory authority (Minnesota Department of Agriculture) and sending a written notice to the dairy farmer(s) involved; notice to remain in effect as long as two of the last four counts exceed the 1.5 million cell count; an inspection of the farm(s) in question must be made and assistance provided; a probationary period ensues, and the milk is to be rejected if "corrections are not made."

THE SCREENING AND CONFIRMATORY TESTS

As outlined in recommended requirements of the USDA (see Federal Register 1972. 37(68):7050) the accepted screening tests are four in number:

1. California Mastitis Test (CMT)
2. Catalase Test (CT)
3. Modified Whiteside Test (MWT)
4. Wisconsin Mastitis Test (WMT)

Confirmatory tests are to be made when test results reach the following levels: CMT 1+, CT 30%, MWT positive (1+), WMT 21 mm. Confirmatory tests include the Direct Microscopic Somatic Cell Count (DMSCC) or equivalent, or

the "Electronic Method." In the Federal Register document the DMSCC is referred to as the Direct Microscopic Clump Count Method, but this is rather the method for counting bacterial cells. The two tests are similar, but far from identical, and it seems important to note this fact. There are now several devices that could be termed "Electronic Methods" of counting cells. Of these, the Coulter Counter procedure is most widely used and it is this method that is outlined in Standard Methods for the Examination of Dairy Products. This procedure is currently under review and you can expect to see some modification as time goes by.

Of the four screening tests mentioned here, only the Wisconsin Mastitis Test sees extensive use in the grade A abnormal milk control program. The catalase test has been dropped from the approved lists based on its lack of accuracy and precision and its tenuous relationship to DMSCC. Both the California Mastitis Test and Modified Whiteside Test suffer the need to make enterpretive judgments of end results. The Wisconsin Mastitis Test, though not without disadvantages, does allow for a direct reading of results.

THE PROBATIONARY PERIOD

Whenever the cell count exceeds 1.5 million, the dairy plant is expected to send written notice to the producer. When two of the last four counts exceed that level, the written notice must come from the regulatory agency. The last notice remains in effect as long as two of the last four tests remain above 1.5 million in count. At the same time an inspection is required, also by the regulatory agency, and at some time between the third and fourteenth day following this inspection, a sample of milk is taken for further analysis. If this sample proves excessively high in cell count (over 1.5 million), action could be taken to suspend a producer's certificate to sell milk.

WHAT THIS MEANS

Past experience with the grade A abnormal milk control program indicates that a relatively small number of dairy farmers will find themselves in violation of the 1.5 million standard once, and far more rarely two out of four times, during a six-month period. Nonetheless some dairymen will be affected and the program should serve to identify these persons and to get assistance to them. At a count of over 1.5 million cells in bulk milk, a dairyman does indeed have a most serious herd health problem, and assistance should be welcome. Programs of control such as this one tend to focus generally on the poorest of the poor of herd managers. Often these are farmers who take little interest in their dairy enterprise. If the program is to be truly effective, the industry should be prepared to render assistance, when results indicate need, to dairymen with counts in the 1.0 million range. These farmers, too, have serious problems and control effort is needed.

SUBSTITUTES FOR MARGARINE OR BUTTER

We have now come full circle to where substitutes for substitutes must be appropriately named if they are to enter the market stream. In the Federal

Register of August 30, 1976, FDA proposed common or usual names for substitutes both of butter and margarine. The word, substitute, implies products that contain less fat than the standard, i.e. less than 80 percent. Following are the nuts and bolts of the proposal:

1. The product containing less fat than butter or margarine would be called "_____spread." The blank space would carry the common or usual name(s) of the fat and/or oil ingredients, together with a declaration of the total percentage by weight of fat. Some examples cited by FDA include:

   * vegetable oil spread -- contains 40 percent fat
   * dairy spread -- contains 40 percent fat
   * vegetable oil and dairy spread -- contains 40 percent fat

2. If the substitute is nutritionally inferior to margarine or butter, it would also have to be labeled "imitation." Nutritional inferiority depends on the content of vitamin A. To avoid the imitation label such products would have to contain at least 15,000 I.U. vitamin A per pound.

   Butter and margarine are also sources of vitamin D and vitamin E. However, for reasons cited in the preamble to the proposal, FDA has chosen not to consider these two vitamins as they might relate to nutritional equivalency.

3. Interested persons may submit comments to the Hearing Clerk, Food and Drug Administration, Room 4-65, 5600 Fishers Lane, Rockville, MD 20852, on or before October 29, 1976.

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