all at this time.

I would like to call on Mr. Wallenfeld at this time.

MR. WALLENFELD: Mr. Whiting, ladies and gentlemen: It is a real pleasure to be a small part of this convention. I have certainly enjoyed being here today. I am sorry I couldn't be here yesterday. I certainly would have been here if I had known of the dates of your convention and if I hadn't promised to be at another place.

This subject that has been assigned to me, the subject of "Mastitis" has probably been discussed more than any other of the diseases of the dairy cow. Mastitis really means inflammation of the mammary glands, if we look up the definition of it. In the broad sense as we have become accustomed to use the term, we have included quite a large number of different infections. It includes the miscellaneous infections with what we call micrococci, staphlococci and may also include the bacteria of the coli type.

Some have considered infections with certain types of bacteria as mastitis but for the purpose of this discussion it might be more practical to include all of these disorders that the layman has considered as mastitis, but the farmer in other words is inclined to call gargot.

We might consider these disorders from the physical effect that they have on the cow, and secondly from the effect that they have on the properties of the milk itself. Abnormal swellings of the udder and in some cases quarters that have completely withered are the result of the mastitis with which some of you are quite familiar. Reduced flow of milk always seems to come from mastitis. The physical appearance of the milk may or may not appear abnormal. Watery, flakey and cloudy milk, of course, is common from mastitis infected cows but much infected milk cannot be detected by just observation alone. The physical and chemical nature of the milk is changed. Delayed coagulation is quite common. A change in mineral composition is also a usual occurrence which may cause certain difficulties. The disease is quite prevalent.

Russell, a Canadian experiment station worker, estimated that 25 to 50 per cent of the dairy herds in North America were infected with mastitis. Others have given different estimates. Olson of the Dairy Department at the South Dakota Agriculture College has estimated that the herds in that section had infections varying from 20 to 90 per cent. I just mention that to show that the disease is quite widespread.
One tendency on the part of the farmer is to blame most of his quality troubles to mastitis. It is always much easier to lay the blame on the cow than to take the blame ones self. I have discussed this with a lot of dairy men who have had trouble with their milk supplies. Sometimes some sections especially for some reason or other, the farmer will say right away, “Oh, it must be some cow in the herd,” when more often the trouble is really from slack methods somewhere along the line, but it is much easier to blame the poor cow than to find out the facts. Maybe some of us are to blame for that by stressing mastitis at times without bringing in the other quality factors.

The importance of mastitis may be considered from several angles. We might first consider the angle which we speak of as the aesthetic angle or the angle of distastefulness or you might say common decency on the part of the consumer. None of us like to eat any animal products that come from animals that are not absolutely healthy. That is one thing I think all of us need to consider. We can't emphasize this factor too much in getting more consumption of dairy products.

The health aspects of mastitis have been discussed a great deal in the city milk markets. Health department officials have been quite interested in it. You usually hear the statement that it is of practically no significance, from the health standpoint. These cases where human disease has resulted are so rare that that should not be over-emphasized. To the farmer I think we should probably emphasize the economic importance more than anything else.

Quite a number of the experiment station workers have done quite a lot of investigating of mastitis. Shaw and Beem for example in Pennsylvania have found that with quite a large number of cows they studied mastitis infections caused a reduction of 24 per cent in total fat content and a reduction of about 22 per cent in total amount of milk produced. Some other investigators at Kansas in a study of about 370 lactic periods found that mastitis reduced the yield by almost a thousand pounds in the production of the cow.

Another factor that we need to emphasize as far as the farmer is concerned is that the mastitis is likely to eventually impair or destroy the milk secreting function permanently. Once a quarter is lost it is likely to remain lost as far as milk production is concerned, and the cow's producing ability is permanently impaired. Another thing about mastitis, it does give trouble in most milk areas and may give trouble to the small fluid milk dealers in the small towns where raw milk is sold, and that is that mastitis milk has a tendency to go rancid much more quickly than milk which is normal.
We might summarize then our concern about mastitis from three angles—human healthfulness which we must consider because we don't want any consumers to get any impressions that we are not always concerned with that as the danger of infection from that source as far as human infections are concerned. Then secondly, this appeal, this aesthetic appeal of the consumer—I use that term because it is hard to find another term to describe it. I might say the distastefulness of consuming any animal products that are from animals that are not entirely healthy. That factor has to be considered as far as the consumer is concerned, and I think we will all do well to keep that in mind whenever we discuss that in consumer groups. Thirdly, the money angle involved can't be overemphasized. We just can't talk about that any too much. The reduced yield to the cheesemaker from mastitis milk is well-known to you all. I don't need to go into that. The additional trouble and time due to delayed coagulation is also quite familiar to you. The reduction is productivity of the cows to the farmer, as mentioned before, is a strong selling point of mastitis prevention but you men are quite well acquainted with those things.

I think what you are interested in primarily is a practical solution of the problem. What is the best procedure to follow? What can we do about it? We talked a lot about mastitis but we have done probably less to eliminate mastitis than any other major disease in dairy cows.

First, we might all of us emphasize the reduction of fat content as well as the reduction of total milk due to mastitis infection. We might show by example that cows producing about 280 pounds of butterfat, if they become infected with mastitis according to some of these figures I have given you, approximately 80 pounds of that butterfat would be lost through mastitis infection. That amounts to quite a lot even with the low price of butterfat at the present time. Even at about 30 cents that makes a difference of about $20 a year in the returns from that cow. That would go a long ways towards paying for the difference between the returns of the cows that are sent to the butcher and the cows that have to be bought to replace them.

The importance of keeping mastitis from spreading, that is by milking the infected animals last and refraining from milking the first few squirts on the floor is something that should be emphasized. I think we could all stress the importance of guarding against practices that are conducive to mastitis, that is for example, kicks, bruises or injuries to the others, driving the cows with distended udders, thus breaking down the mammary tissues should be guarded against.
You men who are at the receiving plants of cheese factories can do a lot to help the farmers by calling some of these things to their attention. Undue exposures to cold and heat—concrete floors has a lot to do with increasing mastitis. Poor judgment in certain concentrates has in many cases been held responsible, and of course, the spreading of infection, spread of bacteria that are a known cause, spread through the milking machine where judgment isn’t used.

How can we get farmers to detect so that they know when their cows have mastitis? In years past some members from our department or the Department of Agriculture—last year I understand Dr. Larson talked to you on mastitis and pointed out the number of tests that are available. I am not going to discuss those because I do think that if the average farmer is alert he can detect a lot of the mastitis, at least the largest percentage of it by carefully watching the cows every day.

I realize that I am taking a little more time than I am allotted to me so I am going to sign off with just this statement again—let me emphasize the danger of talking too much about mastitis without talking about the other quality factors at the same time because if we do, as I stressed before the farmer is too likely to want to lay the blame on the cows and shirk the responsibility himself when in reality so much of our poor quality troubles are not from mastitis but from just lack of proper care in every step in the production of milk.

It has been a pleasure to be here. Thank you very much.

PRESIDENT WHITING: Now we will have the final report of the resolutions committee, presented by A. H. Graf of the resolutions committee.

MR. GRAF: Mr. Chairman, ladies and gentlemen, I have been requested to read a letter from the Sheboygan County Cheesemakers’ Association, Plymouth, Wisconsin.

November 6, 1939

Mr. C. J. Ebert, Secretary,
Wis. Cheese Makers’ Association,
Gresham, Wis.

Dear Mr. Ebert:

The Cheese Makers Association of Sheboygan County voted on October 27, to send the following communication to the State Cheese Makers Association. And request that it be read at the State Convention, at Fond du Lac.