

MILK QUALITY

Waupun Veterinary Services, LLC - Your Progressive Dairy Partner since 1958

MALDI-TOF Testing for Environmental Streps

MALDI-TOF is an advanced method of identifying bacteria at University Laboratories. Matrix-assisted laser desorption ionization–time-of-flight mass spectrometry (MALDI-TOF MS) is a diagnostic tool of microbial identification and characterization based on the detection of the mass of molecules.

An advantage of MALDI-TOF testing is that it can provide bacterial identification information more specific than normally reported for mastitis causing organisms.

Most herds that use on farm culturing for treatment decisions do not treat gram negative organism and use antibiotics for gram positive bacteria. Several herds have experienced less than ideal treatment outcomes for some gram positive Strep. Sp bacteria. There are several Streps that are known to be hard to treat and can actually act as a reservoir for bacteria like contagious bacteria and can be spread during the milking process. *Lactococcus graviae*, *Lactococcus lactis*, and *Streptococcus uberis* are bacteria that fit into this category. These bacteria create chronic high SCC cows (over 1,000,000) that do not respond to treatments. Routine culturing does not break the environmental Streps down to genus and species. The MALDI-TOF testing is best done in conjunction with DHIA testing. If a herd is experiencing environmental Streps that are not responding to treatment and are becoming chronic high-count cows (SCC over 800,000 for two consecutive months) these cows should have a CMT test done. If multiple quarters are high these cows should be considered for culling due to the low likelihood of being cured. If a single quarter is high these quarters should be cultured and sent to a university for further testing. Cows that are identified with *Strep uberis* or *Lactococcus* are candidates for culling or segregation due to the poor cure rates and the contagious nature of the organisms. It is important to accurately know the bacteria causing the high SCC cows because not all “environmental” pathogens have the same effect on SCC.



Quali-Tru String Sampler

There are times when it is important to get an accurate string sample from a herd. Waupun Vet has a Quali-Tru string sampler that clients can use to help with diagnostics. String sampling can be used for contagious mastitis diagnostics (Myco, Prototheca, Strep ag), BVD sampling, or nutrition diagnostics.

Please contact the clinic if you need a string sampler.

National Mastitis Meeting

The 63rd National Mastitis Annual Meeting is January 29-February 1 in Dallas, Texas. The meeting’s theme is “Boots on The Ground-Making Milk Quality Happen.” This is a good meeting where you are exposed to milk quality experts from around the world. There are general sessions that include speakers from research, industry experts, dairy producers, marketers, and consumers. It is also an excellent chance to network with other people interested in milk quality.

If interested in attending the meeting, visit the NMC website and look up more information on pricing and registration.

