



Why Lacti-check

Lacti-check earns its place on the counter top of any laboratory because of the value it provides to the milk processor and cheese processor.

The milk processor has such obvious needs it is almost unnecessary to point out. The need to know the fat composition of products being packaged is paramount, skim, 1%, 2%, whole milk (3.3%), half and half (12%), light cream (20%) and heavy cream (30%). The requirement to deliver the correct amount of fat in our liquid dairy products is legal and monitored by various regulatory bodies. While many of these products are made by blending it is often helpful to know in advance just how much cream needs to be removed to meet the compositional goals.

Processing milk is a mechanical process using one of two approaches, remove all cream from the milk and create a tank of skim and one of cream at a known fat content verified with the Lacti-check. Blend back in the ratio's to give the correct composition and pack. The other is to skim some of the milk and work with three products, unstandardized whole milk (composition verified with Lacti-check), skim milk and cream of a known fat content. Not so the Cheesemakers.

Milk composition is a variable in processing; Cheesemaking is the art of blending the various components via an imprecise biological process when frequently we do not know the composition of the raw material. Lacti-check offers the Cheesemakers the opportunity to look inside the raw material and make a very conscious decision about manufacturing. The Lacti-check provides more data than you can imagine, fat, solids, protein, density and added water. Cheesemakers know that yield is tied to the protein and fat content of milk, the major components recovered from milk. The final composition of the milk impacts how the Cheesemakers must manipulate the components to get the same physical and textural properties in the cheese. As fat increases disproportionately in late season milk over the protein Cheesemakers who standardize increase the level of fat removal to maintain the protein to fat ratio (p:f). In doing so they maintain the right physical and textural characteristics and chemical composition.

For the non-standardizing Cheesemaker there is the heads up factor that will assist in a proactive approach to your Cheesemaking.



The inverse value is to know that you have accidentally added water or the farmer has added water to your milk. Added water is a cruel way for a farmer to steel money from his customer, getting paid for volume he or she is leaving the processor with the hidden cost of transport, cooling, heating and cooling when pasteurizing and heating again when making cheese and extra whey, 10# of water, just over a gallon should have made a nominal pound of cheese, instead the Cheesemaker has 1 pound less cheese and lot of hidden cost.

But perhaps the most important value is in communication, the LactiCheck and the modified Van Slyke Formula can generate a theoretical yield of the milk from each supplier. The real value of milk is in the product it produces for the processor, a long standing failure of processors to communicate with producers correctly has meant that too many processors produce for volume and fat. I will venture to say that 95% of all the goat milk in the USA gets used to make cheese, the message to send to the farmer producer is we want to buy pounds of protein and pounds of fat; we are not interested in hauling your water. The prized component protein or more accurately casein the foundation building block of all cheese, pay for what you want in your milk, discourage what you don't.

The impact on composition of milk for a Cheesemakers is profound, I recall making cheese in a seasonal plant in New Zealand from high solids milk, typical casein contents of 3.3%, all seasonal. The switch to low solids milk in the winter period saw yields drop to at times less than 80% of that beautiful high solids milk. All the milk in this plant was standardized to a casein to fat ratio. This low solids milk was produced primarily for the bottled milk market.

If you are making butter what type of milk is the most valuable to you?

What processors need to understand is this: how can a LactiCheck impact my business, let's summarize:

What do I need to communicate to my supplier?

If you are buying milk do you want the water?

Cheesemakers want protein.

Buttermakers want fat.

LactiCheck can keep me legal when I'm selling standardized fluid products.



Lacti-check can help with milk changes in my cheese plant or when standardizing vat milk can be checked prior to Cheesemaking.

While we often focus on the benefit to us in processing, the value over time of buying better milk may outstrip any other perceived benefit based on my experience of milk purchasing practices particularly of the minor milks.

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