Real Buttermilk, Real Goodness!

My readers have listened to stories about my grandmother—her homemade bread, cow butter, cottage cheese and other things I enjoyed as a child. I haven't talked yet about buttermilk on the farm but was reminded of it a few days ago in a conversation in which a friend said she was turning green when I mentioned it as a key ingredient in one of my cake recipes.

There was an art to making "real" buttermilk. You had to know when the cream was just soured enough and not spoiled. For those of you younger than I am, the use of the term sweet cream butter used on commercial packages came from the fact that butter churned on the farm usually used slightly soured or fermented cream.

If you have ever marveled at the deliciousness of European butter, it might interest you to know that most of it is produced from cultured or soured cream. But I digress.

Not having refrigeration, grandma knew that the buttermilk would keep longer than raw milk and she also knew the perfect timing to churn the butter before the cream might spoil. I also want to mention that her buttermilk always contained small pieces of butter and it had a creamy, buttery taste even though it was tart.

Where did buttermilk originate? I might assume that it originated at the same time some say butter did, as a product of accidental discovery on a journey when milk was sloshed around while carried on a pack animal. It might also have been simply a matter of not throwing anything away when calories were needed by early farmers and their families.

At any rate, uses of buttermilk expanded beyond beverage in the 1800s when it became an ingredient in many recipes. Church and Company started producing baking soda in 1846 and it was soon discovered that a little baking soda added to an acid (buttermilk contains lactic acid and small amounts of other acids) would greatly reduce the time needed to prepare bread and other baked products typically relying on yeast for leavening. Commercial production of buttermilk began in the 1920s.

The chemical pathway from cream or milk to buttermilk involves several changes. Bacteria in the liquid initiate the process of fermentation due to the presence of lactose (milk sugar) resulting in the formation of lactic acid. The lactic acid lowers the pH of the liquid which results in the precipitation or settling out of the casein (protein). The lower pH—acidity—makes the liquid taste sour while the precipitated protein causes it to thicken.

Today, the buttermilk available in most stores will be labeled as "cultured." It has been made with fresh pasteurized milk to which lactic acid producing bacteria have been added.

The Board regulates buttermilk as a Class I beverage, setting minimum wholesale and retail prices. Just for comparison sake, the January 2020 minimum wholesale cost of a quart of

buttermilk was \$1.0406 and the minimum retail cost was \$1.1500. For January 2021, the minimum wholesale cost of a quart of buttermilk is \$1.0367 and the minimum retail cost is \$1.1500. Both years' figures are for PA Milk Marketing Area 4 (Harrisburg and southcentral PA).

I decided to go back a few years prior to 2016 to check the resale prices. In January 2016 the minimum wholesale price for a quart of buttermilk, Area 4, was \$0.9617. The retail minimum cost was \$1.0600. Since these increases do not seem too high, I may have to do a study to compare increases for other types of Class I milk beverages such as chocolate milk. Perhaps buttermilk has a steady customer base, which might impact the demand and, ultimately, the costs. Just a thought as I could not find any references on buttermilk pricing beyond many about dried buttermilk.

At any rate, I would like to know if there are other buttermilk fans out there among my readers. And, always remember that PMMB is available to respond to questions and concerns. I can be reached at 717-210-8244 or by email at chardbarge@pa.gov.