

U.S. Dairy Industry in Brief

Milk production in 1999 was just over 162.7 billion pounds, almost twice the quantity produced in the early 20th century, when the first concerted efforts to develop alternative milk pricing institutions were being made. About 111,000 operations had milk cows in 1999. Milk is picked up at the farm, most often by tank truck, at least every other day and is moved to one or more of the 422 fluid bottling plants or 1,258 dairy product manufacturing plants for further processing and manufacturing. Every step of the way, the milk must be handled under sanitary conditions to guard against bacterial contamination and either marketed promptly as fluid milk or processed into storable manufactured products. Milk production fluctuates seasonally—generally expanding during the spring and early summer (the flush season) and contracting in the fall and winter (the short-supply season)—making it necessary to coordinate a supply that is rising when fluid milk demand is falling. In addition, while milk production shows little daily variation, fluid milk sales vary substantially from day to day. This daily variation in sales, primarily because of consumer buying patterns, becomes a significant problem when balancing fluctuating milk supplies with demand and pricing the various uses of milk. Manufactured dairy product demand also shows seasonal variation—cheese and butter demands are heavier in the fall and early winter.

Historically, two grades of milk have been identified: Grade A and Grade B. The grade depends on the milk meeting certain health (sanitary) standards. Sanitary standards, some of which might also be called “quality standards,” include the somatic cell count and bacterial count and the conditions of farm facilities, including the milking parlor, milk storage tank, and water well. Grade A milk meets the sanitary standards for use in fluid milk products and can be used for any dairy product. Grade B, or manufacturing grade, milk meets slightly lower standards and can be used only for manufactured dairy products. Grades are not the same as the classes of milk that are used in classified pricing systems. Prior to World War I, less than half of milk and cream marketings were Grade A. Only about 3 percent of all milk marketed did not meet Grade A standards in 1999, even though roughly 60-65 percent of all milk marketed ended up in manufactured dairy products.

For many years, cooperatives owned by dairy farmers have played a prominent role in the U.S. dairy industry. In the early 1900’s, they were organized to bargain for prices with dealers and handlers, a role they continue to perform today. The cooperatives have also had a hand in how public dairy pricing policies and programs have evolved. In the 1960’s and 1970’s, the scope of dairy cooperatives changed as they became regional rather than local organizations. The trend continues today with some cooperatives operating coast-to-coast, though not in all regions.

Milk possesses characteristics that individually describe other agricultural products, but taken together make marketing fluid milk different from marketing any other agricultural commodity. Milk is produced every day and must move to market at least every other day—thus it is a flow commodity. Eggs are also a flow commodity, but they can be and are stored. Eggs also do not have the numerous multiple uses at different values that milk does. Meat can be stored in carcasses or cuts, vegetables are storable for several days, and apples and pears can be stored for months.

In the short run (day to day), milk supply is not attuned to milk demand. The cows produce every day and the milk must go to market, even if the demand on a particular day is low. The demand for milk for bottling (packaging) is almost zero on Sundays and small on Saturdays and Wednesdays, since most plants close on those days in response to buyer demand schedules. The milk that is still produced could be discarded only at a high cost so it goes to manufactured product uses. Substantial economies of scale exist in managing milk supplies to deal with these day-to-day variations. A single manager, a role many dairy cooperatives have taken on, is more efficient than several individual firm managers are, which encourages centralization of the milk supply management functions.

Fluid grade milk can be used for milk and cream products or to manufacture cheese, butter, and other products. But its value in manufactured products is no greater than that of manufacturing grade milk. The costs of balancing a fluid milk market must be covered by some means—which is where classified pricing comes in.