

Abstract by Paul Edwards - The collection of data from milk meters for use in research

Milk meter technology is becoming more widespread on commercial farms utilising pasture based production systems. The decision to invest in technology to measure milk yield and other components through an in-line milk meter system is often an attempt to overcome a specific issue such as mastitis detection, or to monitor production. However, many milk meters are capable of collecting a wide array of data, far beyond the scope of the original investment. This untapped data source has significant potential for the dairy industry. Some examples include: improving milking efficiency, developing an algorithm to detect lameness, or, if data were collected on a large scale, increasing the reliability of national databases. The use of data for such endeavours requires the collection of standardised data from a wide range of systems and manufacturers, diverse in the way they store and handle data. Robust methods of transferring data from herd management software on farm to a centralised location are critical to populating a successful database. Once in a centralised database, data can be checked for errors; when the daily monitoring of specific cows is required problems with electronic identification failure or milk meter failure can be an issue. Following processing, data can be analysed to develop benchmarks, new or improved algorithms, or be merged with an existing database. Therefore, if these challenges can be overcome, the use of milk meters on commercial farms offer researchers the ability to collect vast quantities of data from large numbers of animals in diverse environments for a minimal amount of labour and cost. As part of a study to develop benchmarks for milk efficiency measures in rotary dairies, data were collected from 80 farms, using six different systems, for two five day periods from September-November 2010 and February-April 2011. Issues associated with data collection, collation and reliability are presented in this poster.