**Marketing Milk – an Overview**

Milk produced by dairy farmers is sold to processing companies such as Murray Goulburn Co-operative or Country Valley Milk. Their factories are located at Erskine Park in western Sydney (together with several in Victoria) and Picton south west of Sydney respectively.

Laws enacted by the NSW Government (via the NSW Food Authority) mean that all milk must be cooled to below 5 0C immediately after milking and held at that temperature until collected by the bulk milk tanker. Failure to do this would result in the milk being rejected by the tanker driver and the farmer having to dispose of the milk. This step ensures that bacterial growth in the milk is minimised.

**Milk quality**

At the time of collection the tanker driver collects a small sample of milk from the vat for laboratory testing at the processing factory. The following tests are then conducted:

* total plate count – determines the number of bacteria per ml of milk
* thermoduric bacterial count – determines the number of bacteria that survive pasteurisation
* a faecal coliform count – determines if any bacteria of faecal origin are present
* bulk milk cell count – determines the number of somatic cells (white blood cells) in the milk
* a butterfat % test
* a protein % test
* a sediment test
* tests for chemical contamination
  + antibiotics
  + iodine
  + detergents
  + water

The results of these tests help determine the price received for the milk. A premium is paid for milk above 3.95% butterfat or above 3.15% protein.

A price penalty applies to milk which has:

* an excessive bacteria count (a maximum of 71,000 bacteria /ml is allowed)
* an excessive somatic cell count (a maximum of 250,000/ml is allowed)

The milk will be rejected by the factory if it contains:

* antibiotics
* sediment
* water
* blood
* faecal coliform bacteria

**Selling raw milk**

Farmers generally enter into an annual contract to supply milk to one or more milk processing companies. The base amount of milk on this contract is known as the milk allocation and the base price for this milk is fixed. The base price paid by Country Valley Milk to it’s suppliers is currently ??? As mentioned above, the actual amount received per litre is dependent on the milk quality and the levels of contaminants in the milk.

Milk in excess of the allocation is sold to the factory but the price received may differ from that received for the allocated amount. This reflects the supply of milk at the time. In summer, when milk is easier to produce, the price tends to be lower while in winter, when milk is more difficult to produce, the price is usually the same as for the allocated milk.

**Activities for you to complete**

1. Explain why each of the following impurities are undesirable in milk.

* antibiotics
* high bacterial levels
* faecal coliform bacteria

**Activity**

1. Construct a table like the one below and complete it by adding actions farmers can take to improve the quality of the milk that they produce.

|  |  |
| --- | --- |
| **Specification** | **Farmer Actions** |
| High butterfat |  |
| High protein |  |
| Low bacterial levels |  |
| Low somatic cell count |  |
| Low sediment & chemical residues |  |