**Marketing Number 9 Dairy’s Milk – an Overview**

All milk produced at Number 9 dairy is sold to Dairy Farmers Co-operative PTY LTD. Their factory is located at Lidcombe in western Sydney.

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 amount of bacteria per ml of milk
* somatic cell count – determines the amount 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 15,000 bacteria /ml is allowed)
* an excessive somatic cell count (a maximum of 100,00/ml is allowed)

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

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

**Selling the milk**

The farm enters into an annual contract to supply milk to Dairy Farmers Co-operative. The base amount of milk on this contract is known as the milk allocation and the base price for this milk is fixed. Currently the farm’s milk allocation is 160,000 litres per month and the base price is 47 cents per litre (August 2013). 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 coliforms

**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 |  |

**Answers**