



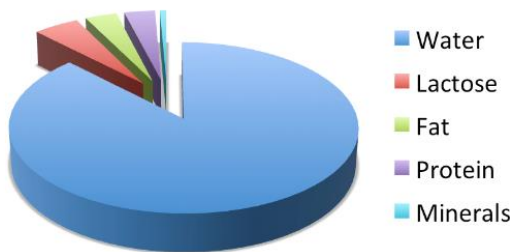
Fiji DAIRYNOTE 2.2 – Feeding and Nutrition: Water for Cows 24/7

Good Practice Guide for Fiji Dairy Farmers

The importance of water

Out of the total nutrients required by a dairy cow, Dry Matter Intake (DMI) accounts for about 12% and water accounts for 88%. Despite this, water is often overlooked, which is one of the major limiting factors in milk production (milk comprises approximately 85% water). A lack of water decreases milk production by affecting the digestion of the cow – mainly in the rumen, which requires a constant PH and temperature to allow the microbes within it to do their job. Water also assists the production of saliva and other fluids to aid in the digestion of the forages and other sources of feeds fed.

Physical Composition of Milk



Water is one of the most important nutrients for cows. Cows are like humans. They like to eat drink, eat drink, eat drink, etc. But unlike humans, cows can drink up to 20 litres per minute.

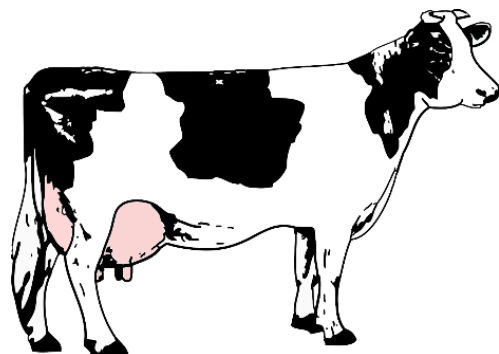
Water

- Helps breaks down the food your dairy cow eats
- Transports nutrients through her system
- Helps chemical reactions occur
- Helps maintain normal body temperature
- Is one of the basic requirements for life, i.e. animal welfare

How much water does a lactating dairy cow need?

Maintenance = 70 litres/day
 Plus 5l for each litre of milk produced
 Plus 3l for each kgDM
 Plus more in hot weather

i.e. For a cow producing 10l and consuming 15 kgDM:
 Maintenance = 70l
 10l x 5 = 50l
 15kgDM x 3 = 45l
TOTAL = 165l +





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How to make sure your dairy cow gets enough water

The easiest way to ensure your dairy cows get enough water is to have it available when they want it, i.e. 24 hours a day, 7 days a week. Cows drunk mainly during eating and just after milking. After making water available to your cows 24-7, you will see an increase in production and the overall health and wellbeing of your cows. The images below show examples of systems that will provide clean sources of water 24/7 that will also save you time in your day.

