Comparing the Costs of Feeds

The cheapest food in cents/MJ of energy and the feed that provides the adequate protein for the class of animal being fed is the basic way of calculating the most economical feed. The cost per MJ of energy can be calculated from a feed analysis or from a table of feed composition.

Exercise 1:
If wheat can be purchased at $330 per tonne of DM with an MJME/kg content of 13.6 ‘DM basis’ and oats can be purchased at $300 per tonne of DM with an MJME/kg content of 11.5 ‘DM basis’ what is most economic option per MJME.

STEP 1
Wheat at $330 per tonne equals 33 cents per kg (Cost per tonne divided by 1000 kg x 100)
Oats at $300 per tonne equals 30 cents per kg (Cost per tonne divided by 1000 kg x 100)

STEP 2
The cost of 1 MJ equals cents per kg divided by the MJME

Wheat
33 cents per kg ÷ 13.5 MJME/kg = 2.4 cents/MJ

Oats
30 cents per kg ÷ 12.2 MJME/kg = 2.5 cents/MJ

Feeds should be converted to a cost per tonne on a DM basis before calculating a cost comparison on the feeds as various feeds contain different amounts of water.