

DISPELLING COMMON MYTHS ABOUT FERTILITY

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Some of the things said - and repeated - by farmers and feed advisors were put to the sword at a recent fertility meeting in Staffordshire. I am sure you have heard, and maybe said some of the following:

- Improving conception rate is the best way to reduce calving index
- Mineral deficiencies inhibit fertility in adult dairy cattle
- Timing of service makes a major difference
- Overfeeding the three weeks before calving affects calf size

Main speaker David Whitaker from the Dairy Herd Health and Productivity Service at Edinburgh University declared all the above comments FALSE. He was speaking at a meeting jointly sponsored by Robert Cope, independent nutritionist and Richard Pearce of R Breeders. Farmers and veterinary practitioners made up an audience of 40.



Myth - Improving conception rate is the best way to reduce calving index

"Conception rate is not as important as the efficiency with which cows are presented for service," said David. "That depends on heat observation, the strength of heat signs and the decision when after calving cows are presented for service. If calving to first service average is 90 days, you will end up with a calving interval over 420 days whatever the conception rate. You can reduce the voluntary waiting days but you cannot reduce the gestation length"

Myth - Mineral deficiencies inhibit fertility in adult dairy cattle

"Take a look at this list and tell me which have been demonstrated by controlled trials (one group of cows treated and one group not treated) to inhibit the fertility of adult dairy cattle"

- Manganese deficiency
- Copper deficiency
- Molybdenum excess
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- Aluminium excess
- Iron excess
- Selenium deficiency
- Cobalt deficiency
- Iodine deficiency
- Phosphorous deficiency

"Molybdenum excess is the only one and works by direct "toxic" impact and not by inducing copper deficiency. Clinically copper deficient cows have been shown to be fertile. Compton had a manganese herd for 2 years - nothing happened. Aluminium excess is pure rubbish. Iron excess might have a hand in the high molybdenum issue, but not on its' own. Selenium can be a problem in maiden heifers only because they are growing and therefore have different needs. There is no real evidence for either cobalt or iodine being a cause.

As for phosphorous, controlled trials have shown NO effect of deficiency on fertility. The reason for this belief is probably about grazing kale when the real cause of poor fertility was energy deficiency because it was not recognised due to cobalt and iodine with the cows getting in calf eventually."

Myth - Timing of service makes a major difference

"The period when insemination produces the highest conception rate is in the 7th to 12th hours of heat. However, there is only 1-2% difference in conception rate between the best and worst period over 24 hours. So timing of AI is not as important as often suggested, especially when you don't know how long a cow has been on heat when you first see her. The best advice on getting cows in calf is to inseminate as soon as practically possible after being seen - and AI again 12 hours later if she is still on heat and if the semen is cheap!"

Myth - Overfeeding the three weeks before calving affects calf size

"Nutrition in the last month of pregnancy makes no difference to the rate of growth of the calf. Yes, growth rates are fast at this time but not through nutrition. The size of the calf at one month to go to birth makes a difference, and that is why nutrition in the 7th and 8th month of pregnancy matters. Calf oversize is more likely due to extended pregnancy length."

Joint sponsor Richard Pearce commented, "This is the third of four meetings we have held with David the main speaker. We see this as an important part of educating everyone associated with herd fertility. Some would say that we sell less semen if fertility is better, but we are happy with that situation as we are here to assist the dairy farmer."

The other joint sponsor Robert Cope summarised, "Most of my consultancy work is now associated with improving fertility. Increasing milk yields from modern cows is fairly easy - it is getting them back in calf when you want to that is the challenge.

It is becoming increasingly difficult for dairy farmers to make a profit. Incorrect statements made by salespersons to enhance their sales pitch should be highlighted. Many products are purchased due to a "fear factor", in that not buying some magic cure will inhibit fertility.

It remains a fact that energy deficiency is the main culprit for failure to conceive, and dry matter intakes are the main culprit of energy deficiency.

David has dispelled some of the myths. My advice is to listen to him, seek independent advice and think very carefully about buying that magic potion."