

PROGESTERONETEST

HEALTHY AND FERTILE COWS - A JOY IN THE COWSHED

By the right use the progesterone test helps you to improve breeding efficiency and/or discover fertility disturbance at an early stage. As the name says already you can measure the value of progesterone.

Progesterone is the hormone which is responsible for the diestrus phase and for the maintenance of pregnancy. Therefore it is also referred as major hormone in the body.

*Inseminate by
a suspicion?*

*With the new device that
belongs to the past!*

*With our new
progesterone device we
aroused a lot of interest
in our area of expertise!*



Topic of this edition

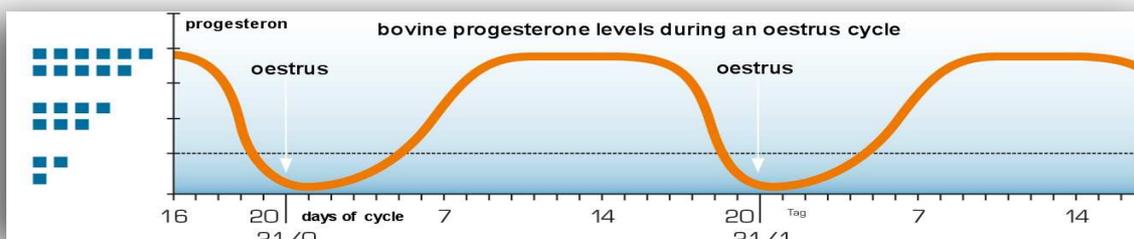
- >> Fertility is not a fluke<<<
- What is progesterone standing for
- Measuring progesterone by yourself is simple and safe
- Your increase in profit per annum

Pregnant, yes or no within 20 minute

Fertility is not a chance find:

During heat there is no active CL (corpus luteum). Therefore the level of progesterone is low to zero (display eProCheck: □).

On the intermediate days between two periods of heat, or equally well, the cow being pregnant, we will find the CL on the ovary producing progesterone. Therefore the level of progesterone will be high. (display eProCheck: ■■■■■). Without progesterone there is no pregnancy.



What is progesterone standing for?

Case 1: Testing whether the cow is open or pregnant

After insemination we want to know whether the cow is pregnant or not. In the case of a healthy cow being pregnant, the corpus luteum regresses on day 18 after the oestrus, i.e. the progesterone level drops to almost zero.

Possible levels of progesterone (eProCheck: ■■■ and eProCheck: ■■■■) in the milk sample on day 19 and/or 20 after oestrus (figure 3). The eProCheck test on day 19 or 20 can show either:

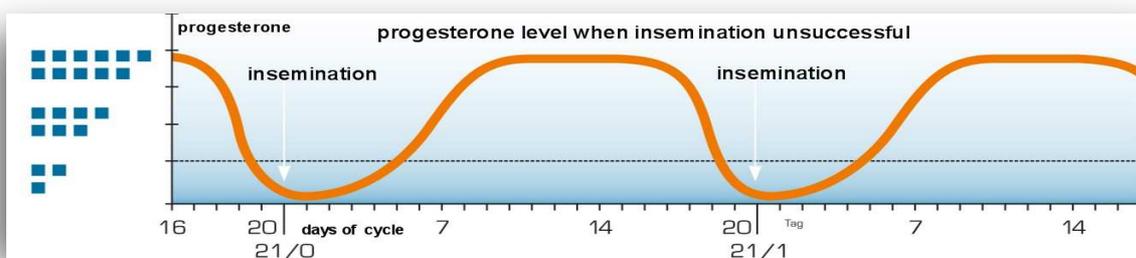


Figure 3: sample taking on day 19. and/or day 20 after the last heat

a) A low progesterone level

The cow is not pregnant

b) A middle progesterone level

It is decisive whether the hormone level drops under the value of 5 ng or not. Another test on the following day is necessary. If the progesterone level has gone down further, the cow is in heat.

c) A high progesterone level

The CL is active, i.e. the cow is pregnant except for cases of dysfunctions (approx. 20% of cases) (figure 4). Reasons for a dysfunction:

Ovulation has been delayed: i.e. the productive cycle lasts longer. In this case a wrong diagnosis is avoided by taking a test on day 24.

Premature death of the embryo: At the time of the test the cow is pregnant, somewhat later the embryo dies off.

Existence of a luteal cyst (a persist CL): Whenever the CL neither regresses (on day 18 - 20), nor the cow is pregnant. This fact indicates an abnormal mutation of the uterus simulating a gestation.

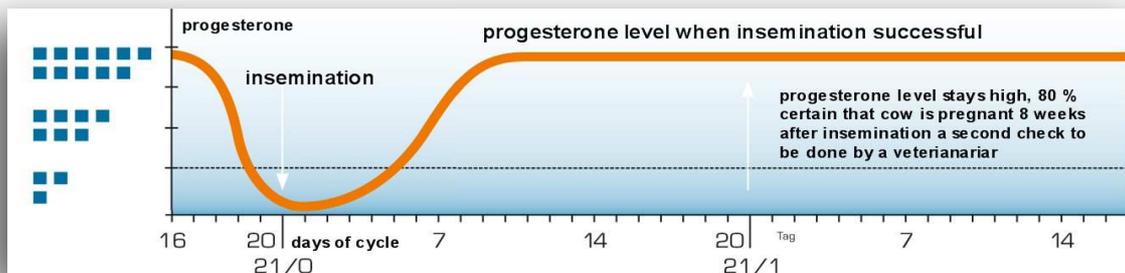


Figure 4: sample taking on day 19. and/or day 20 after the last heat

Case 2: Testing the state of oestrus

Taking **eProCheck** test on day 0 (cow in heat).

- If the progesterone level is lower than 3 ng, there is a very good chance of successful insemination.
- If the progesterone level is high in spite of symptoms of heat, and the cow is not open, it is a matter of false oestrus. The cow has to be watched closely the next 7 to 14 days to notice the next “real” heat. The **eProCheck** has to be repeated.

Case 3: Controlling the reproductive cycle

If the cow after six or more weeks past calving does not show symptoms of being in heat, it must be examined by a veterinary. In such a case additional tests with **eProCheck** support the individual diagnosis. Those 2 to 3 tests are taken in an interval of 7 days starting off any day. You might find out a low activity of oestrus behaviour, and thus determine more accurately the actual day of heat. Or the tests confirm a constantly low level of progesterone, indicating pathological follicle cysts, i.e. cysts in the ovary. In case the tests show constantly high levels of progesterone, the diagnose indicates a persist CL (see last point of case 1). In all of those cases you must consult a veterinary!

Case 4: Ovulation in due time

By taking two tests, one on day 0 (day after heat) and the next on day 7, you can secure whether the ovulation has taken place or not. Shortly after ovulation the level of progesterone rises strongly, with ovulation delayed the progesterone level, too, rises with delay. (figure 5).

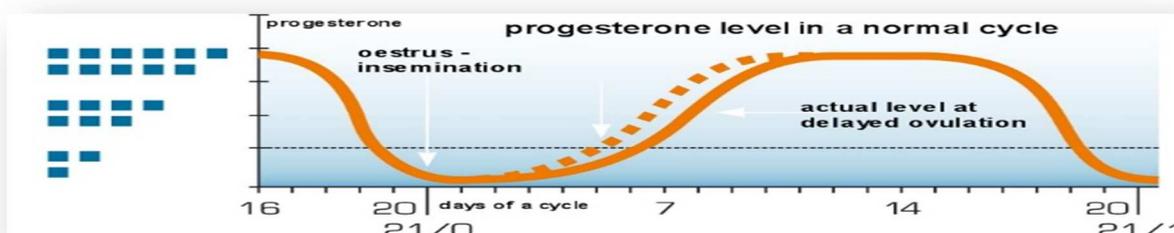


Figure 5: sample taking on day 0 (day of heat) and on day 7 after oestrus

Case 5: Development of cysts

The progesterone level being low on day 7 (after heat) the ovulation has failed to take place, the reason being the development of a follicle cyst. (figure 6). This suspicion can be asserted by taking another test on day 14. If the progesterone level is always low a follicle cyst is developed.

Also if the progesterone level is always high and there was no insemination before the cow has trouble in her cycle. It is necessary to check this cow by a veterinary!

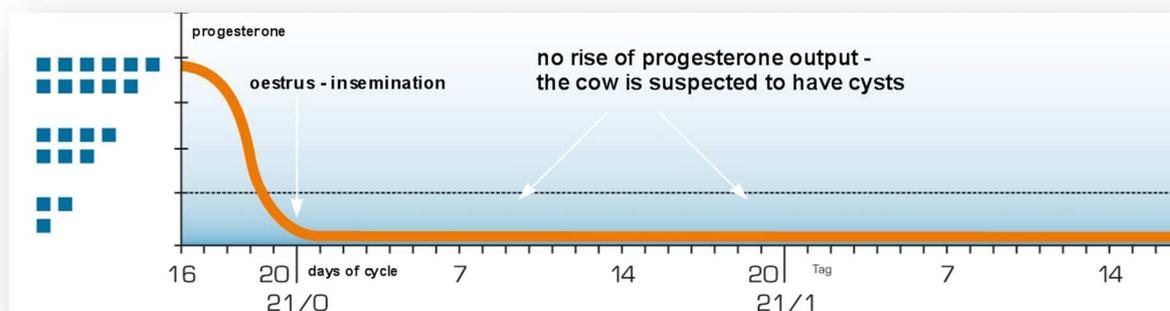


Figure 6: sample taking on day 0 (day of heat), on day 7 and on day 14 after heat or insemination

Case 6: Use of prostaglandin

To make the prostaglandin used as effectively as possible, you should always check whether the animal has a functional corpus luteum. In this case you can initiate the estrus with prostaglandin.

Progesterone

easy and safe
measure by yourself



Contact

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