

Do You Have Too Many Pregnant Cows?

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Have you ever dreamed what you would do if you had too many pregnant cows? To realize more pregnant cows, you must freshen cows that are healthy and that remain healthy following calving. In turn these cows will have higher fertility rates with fewer days open and are less likely to be culled for reproductive reasons.

Today's dairy cow is amazing. She delivers a 100-pound calf, her uterus involutes by 50% in the first few hours after calving, and she manufactures colostrum for the protection of her calf. The first colostrum she produces contains about 25 grams of calcium, which is ten times the amount of calcium circulating in her blood. She must also adapt to a new high-energy ration in an attempt to support the high levels of milk she is producing. Many cows are producing more than 100 pounds of milk per day by the end of the first week post-calving. At this rate she is producing about 13 pounds of edible dry matter. To do this, she has to manufacture 7.2 pounds of glucose since she can't absorb it from her gut! In comparison, a steer which gains at the rate of 3.5 lbs per day only produces 1.15 lbs of edible dry matter.

Given these factors it is easy to see that these cows are actually high performance metabolic athletes. They deserve specialized care. There is a management tool called the 100-Day Contract that you can implement on your farm to keep these animals working at their highest level of performance. The program can be broken down into four areas: the dry period, the fresh period, re-breeding, and measurements and feedback.

Phase One: The dry period:

- 1) Reduce the incidence of clinical mastitis post-calving by using an effective dry-cow mastitis product on all cows at dry-off. An effective dry-cow product cures existing infections and prevents new infections from occurring in the early dry period. The number of clinical environmental mastitis cases can be effectively reduced through the use of an effective gram-negative core antigen vaccine.
- 2) Set a goal for body condition scores. Ideally, cows should score between 3.0-3.5 both at dry off and at calving. Establishing a system to record body scores condition at dry-off, freshening, and at 30 to 45 days post-calving will help. Cows that do lose more than one unit of body condition or are less than 2.5 at the time of insemination are less fertile.
- 3) Consult with your nutritionist to maximize dry matter intake through the late dry period and into early lactation. Adequate dry matter intake decreases many fresh cow health problems.

Phase Two: Fresh cow monitoring.

The goal is to keep cows on feed by early identification and treatment of medical problems (metritis, mastitis, etc).

- 1) Record daily temperatures for the first 10 days to identify medical problems when they are most responsive to treatment. Sick cows will often spike a fever one day before they go off feed.
- 2) ECP (estrogen therapy) to cows with difficult calvings, stillbirths, retained fetal membranes, twins, and milk fever will keep the uterus sensitive to oxytocin and assist in expelling uterine fluids. Additionally, leuteolizing prostaglandin should be given between day 14-21.
- 3) Develop standard operating procedures that determine personnel responsible for daily rectal temperatures and medically sound treatment protocols.

Phase Three: Breeding

A systematic breeding program ensures that all cows are given the opportunity to get pregnant as soon as possible. Synchronize cow groups and either breed all you find in heat followed by timed AI **or** AI all of them. This will drive heat detection to a service rate of 100% raising your pregnancy rate to 35% on the

first cycle (compared with the national average of 14%).

***Phase Four:
Feedback and measurement***

Develop a scheme to monitor the results of your management program. These results help evaluate successes and identify correctable problems.

The “100 day contract” works best when begun with the dry and fresh cows. Cows healthy from the dry period will respond better to a systematic breeding program.

Choose an advisory team that consists of yourself, herdsman, employees, your veterinarian, appropriate consultants and an impartial facilitator to keep your meetings on track. Pharmacia Animal Health representatives have been trained as facilitators and this service is offered to you at no charge. The goal of this group is to ensure your success through the use of written mission statements and standard operating procedures.

Once the 100-Day Contract is in place, you can better assess and improve your herd's performance. By taking impeccable care of your bovine athletes through preventing health problems, identifying and treating problems early, and optimizing dry matter intake, you will improve your reproductive efficiency. More milk production and more calves will also ultimately lead to more profits for your dairy. So, now, I ask you again. Do you have too many pregnant cows?