



CEDAR GROVE VETERINARY SERVICE NEWSLETTER



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AGE OR SIZE? HOW SHOULD I DETERMINE WHEN TO START BREEDING MY HEIFERS?

Protocols are becoming the norm on most farms. They are useful as farms have become bigger to make sure every worker is on the same page about how the farm should be run. Managing reproduction on a farm is no different. It requires precise procedures to make sure animals are bred in a timely matter so they can conceive and deliver healthy calves. In heifers, that time is usually when they are at a certain age that will allow for a 23-24 months at first calving. However, is this really the best way to do this?

Most dairies in the US use age to decide when they should start breeding their heifers. A smaller percentage use age, height, and weight to meet the requirements to start breeding. The use of height and weight as an indicator of readiness to breed often makes most farmers nervous, especially if their cattle are meeting the height/weight goals at a younger age.

But did you know that puberty in a dairy heifer depends on size not age. Animals will reach puberty at different ages since their genetics and rates of growth will vary. Heifers with a better diet will reach puberty at an earlier age than heifers on a lower plane of nutrition.

Heifers are commonly fed rations that are lower in protein than what they truly require. This is often done due to economics since protein is the most expensive part of any cow diet. With the current state of the dairy industry, it is understandable that an attempt to reduce feed costs will start with the heifers since they are not producing milk like the lactating herd. However, in the long run, a heifer that is on a ration higher in protein will result in improved feed efficiency and reduced cost per pound of gain. The poultry, swine, and beef industry have all recognized that their true profit lies in improving feed efficiency and

DO YOU KNOW YOUR ANTIBIOTICS?

Quartermaster

Use: For intra-mammary use to reduce the frequency of existing infection and to prevent new infections with *Staphylococcus aureus* in dry cows.

Dose: At the last milking prior to drying off, completely milk out cow. Warm the syringe containing Quartermaster to body temperature. Insert tip into teat canal; slowly infuse the entire contents. Instill the contents of one syringe into each quarter

Special Notes:

- 96-hour milk discard period following calving
- 60-day meat withhold following infusion with Quartermaster
- Not to be used within 6 weeks of freshening
- Treated teats should be dipped in an effective teat dip

reducing the cost per pound of gain. The dairy industry is still solely focused on cost per head per day.

So how can you as a dairy producer use the idea of cost per pound of gain to your advantage? The most important data you will need are the weights of your heifers at various stages of growth. The following times are recommended for recording heifer weights: birth, weaning, 5-6 months, pre-breeding, and pre-calving. While this may seem intense for a heifer rearing program, dairies that have done it for some time show that there exists a direct correlation between heifers that gain the most per day and increased level of milk production. Another benefit of recording weights is that the nutrition program for the

heifers can be more accurately evaluated and improved to achieve the desired results.

There are several ways in which heifer weights can be recorded. The most accurate is the use of scales. However, these can be expensive, and it may be difficult logistically to move cattle onto a scale at all the desired life stages. A more economical way to estimate weights/heights is the use of weight tapes, tape measures, and hipometers. When using these devices, make sure to familiarize yourself with their proper use and obtain ones that are specific for the breeds of animals that are present in the herd.

It is also important to pay attention to body condition scores (BCS on a five-point scale). From 3 months to puberty, heifers should have a BCS of 2.5-2.75. After puberty, a BCS of 2.75-3.0 is desirable for optimal fertility. At calving, the BCS of 3.25-3.5. Larger BCS can lead to fat deposits in the pelvic canal and potential problems at calving.

One expert found that the highest and most effective gains occur when the crude protein level was between 16-

16.5% starting at 9 months of age. This allowed heifers to grow in stature and muscle deposition without becoming overly fat.

Dairy heifers should be approximately 55% of the average adult weight in the herd with they are bred for the first time. Older data suggest there is a milk loss when animals are bred too young, but those studies were using animals that were undersized and that was the reason for the lower production. If the average dairy cow in the herd is 1500 lbs, then heifers should weight about 825 lbs for their first breeding. Average weight in your herd should be determined by looking at the third lactation animals. Holstein heifers should also be between 48-50 inches tall at the withers at breeding. Info regarding height requirements for other breeds can be obtained online.

Economics are tight on farms. But, by focusing on nutrition, health, and management, great improvements can be made in heifer health and productivity without too much overall cost to the dairy farm.



"Who let Bessie substitute for Rudolf? I wasted half the night jumping over the moon!"

Congratulations Peter DePachter!

Peter was the winner of the drawing for the 2 exclusive Cedar Grove Veterinary Services sweatshirts at the Buying Show on November 17, 2017 at Pizza Ranch. We also want to thank all the farmers that stopped by during the day.

We truly enjoyed seeing and talking with everyone outside of the typical farm setting!