

Wheat Straw can produce “miracle” results.

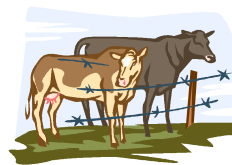


Wheat straw is a low quality feed with the following analysis: TDN 42.5 percent, NDF 73 percent, ADF 49.4 percent, crude protein 4.8 percent and ash 7.6 percent. Most nutritionists would say a feed of this quality would not have a place in a ration of high producing cows. However in special conditions it can be beneficial. For example, a high producing herd in Mexico had excellent feed, especially high quality forages. Dry matter intake was higher than expected for what milk yield would have indicated. The cows were not doing a very good job of converting dry matter to milk. In the opinion of the author rumen passage was too fast and that the digestibility of the feed was being compromised with rapid turn over of feeds through the digestives tract. On a trial basis wheat straw was added to the diet at the rate of two pounds per day. Milk production over the next few days increased. It increased by almost 7 pounds per cow per day with only a slight rise in dry matter intake.

Another example of the use wheat straw was in diets of dry cows. Dry cows need about 0.59 megacalories per pound of dry matter (Mcal/lb) . However some diets may have energy levels of 0.70. Wheat straw allows the use of limited corn silage and grain in the dry cow diet without exceeding the nutrient requirement level of 0.59.

In a 500 cow herd the author worked with, the energy level for dry cows was about 0.70. In this herd displaced abomasums (DA) were about 15 percent in 253 calvings. The diet was changed from high energy to a low energy high fiber diet with the addition of 12 pounds of wheat straw. The DAs were reduced to 0.6 percent in 320 calvings.

Another example of the use of wheat straw in a dairy heifer feeding program.



The primary diet for the heifers was corn silage. Many heifers were returned to the owners over conditioned with body scores above 4.0. Too many of them had trouble getting started after calving and were diagnosed with fatty livers. The rations for this operation were calculated for the different sized heifers. And wheat straw was used and silage was reduced. This was a real benefit for the younger heifers and all the heifers that were fed in the future. The body scores were then about 3.25 and fresh heifer problems almost totally went away.

Wheat straw can only be used in special situations. If the straw can be chopped at the time of baling the bales fall apart easily when placed in a TMR mixer. It is also helpful to add water to chopped straw diets to prevent sorting. *Jenks S Britt, D.V.M., Hoard's Dairyman, January 10, 2008.*

Prevention of Baby Calf Diseases



Three factors are extremely important in determining whether a calf remains healthy, survives a disease, or dies. Managers must

recognize all these factors.

1. The amount of immunity the calf receives from the dam via colostrum.
2. Kind and amount (dose) of infection in the environment.
3. Stress, which is a factor(s) that facilitates or encourages the establishment and destructive effects of disease.

Immunity

Immunity to infectious disease is available to the calf through the first milk (colostrum). The colostrum contains antibodies that are absorbed by the intestine into the calf's blood stream. In order for the cow to produce high quality colostrum she has to be in good health and condition for many months prior to calving. A new born calf has the capacity to absorb the colostrum antibodies into the blood stream for only the first 12 to 24 hours of life. A calf should receive 2 to 3 quarts of colostrum in the first 12 hours after birth. Obtain colostrum milk from a dairy or older cow and freeze it to be used for calves from sick cows or first calf heifers in poor conditions.

Vaccinations

Vaccinate the cows for diseases such as *E. Coli*, *Clostridium perfringens*, rota virus, corona virus, IBR, BVD and others. Vaccinate the cows so the antibodies manufactured in response to the vaccine appear in the colostrum.



Infectious Disease Agents (Pathogens)

Many of the calf disease agents are carried by the cows, and are present when the calf is born. Whether an infectious agent causes disease is determined by the concentration or exposure, and the amount of antibodies carried by the calf. Infections through the navel by *E.coli* occur under conditions of contaminated wet muddy conditions. This disease spreads to joints, belly cavity, heart-sac, and brain. Clean calving areas and the use of strong tincture of iodine to disinfect the navel soon after birth is important for preventing navel infections. A management objective should be to keep the environmental load of pathogens at it's the lowest possible level. Remove the cow and calf from the calving area to a cow/calf area. If any calves in this area become ill they should be moved to a hospital area. The calving area and the second cow/calf area should be as free as possible of contamination with excretions of ill animals. The sick pen area should have adequate shelter, power for heat lamps, and dry clean bedding. Water troughs should be low enough for calves, and loose salt (1/2 sodium chloride and 1/2 potassium chloride) should be accessible to the calves.

Stress

Extreme cold, wet cold weather, wind chill, very hot weather, dust, inadequate feed are stress factors that contribute to disease outbreaks. Milk is the only source of energy for a new born, and this energy sustains the functions of vital organs and defense mechanisms. *Marie S. Bulgin, D.V.M, Michael Lane, D.V.M. Bruce C. Anderson D. V. M. University of Idaho, Cattle Producers Library, cow-calf section.*