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Calf Note #37 – New trends in milk replacer management

Introduction

Milk replacer manufacturers are always looking for new and innovative technologies to bring to their customers. Many of these technologies are nutritional - new sources of protein, fat, vitamins, etc. Others involve attempting to improve the animal's growth or health. This is the concept behind using plasma proteins in milk replacers. Still others include technologies that attempt to improve the way milk replacers are manufactured, processed, stored or managed. One "new" technology involves the use of "multiple bag" systems of milk replacer feeding.

"Multiple bag" milk replacer feeding systems are simply milk replacer ingredients placed in more than one bag. For example, in a "two-bag" system, all milk replacer ingredients except whey are included in one bag. The calf raiser then buys his/her own whey and blends the two ingredients on the farm. Currently, several milk replacer manufacturers in the U.S. are selling "multiple bag" technologies in selected markets.

While this marketing concept may be new to calf raisers, there is nothing new or innovative in the concept. In the 1970's and 80's, dairy producers in the U.S. began to purchase their own commodities (by-products, protein concentrates, etc.) and blend their own feeds - particularly total mixed rations. Since then, using commodities has become commonplace. Some producers have been very successful in incorporating commodities into their feeding programs and other have not. As with any commodity, there are benefits and risks associated with multiple bag feeding programs.

The benefits

There are some benefits of a multiple bag milk replacer feeding program. The primary one is a reduced price. By reducing the amount of commodity (whey) used in the manufacturing process, the milk replacer manufacturer can reduce the cost of the final product. These cost savings are usually associated with lower shipping costs. When a milk replacer manufacturer has to ship the product long distances, the cost of shipping whey (usually around 50% of a milk replacer formula) can be substantial. These reduced costs can be passed on to the producers. However, most formulas still require the addition of whey in the concentrate portion of the milk replacer, so cost savings are not usually associated with eliminating the use of whey in milk replacer plants.

The risks

There are several risks and costs associated with this type of product. It is important to know these risks before selecting this type of product. They include:

- the producer must obtain his/her own whey. The time and energy used to find reliable sources of high quality, consistent whey can be substantial. Many cheese plants will contract

with large users of whey to minimize the number of customers they need to work with. Thus, smaller producers may not be able to contract with cheese plants.

- the quality of the whey can be remarkably variable. Like other commodities, the nutrient content and degree of microbial contamination in whey can vary from producer to producer and from load to load. This variability must be properly managed to ensure adequate nutrition for the calves. The vast majority of whey produced is high quality. But some will not meet specification or may be contaminated with bacteria such as *Salmonella*. Unscrupulous brokers may sell this whey to unsuspecting calf raisers who don't have the time or resources to establish proper quality control programs. The result can be serious variation in nutrient content of the whey, or outbreaks of disease on the farm. Most large whey buyers (e.g., milk replacer manufacturers) have stringent quality control programs to ensure that the product meets specifications. Also, many use only edible whey, which further ensures excellent quality in the product.
- errors in mixing can lead to significant variation in nutrient quality.
- inventory control of both whey and protein concentrate is required. If the producer runs out of either product, the calves cannot be fed. And obtaining whey at short notice may be difficult

There many options in providing milk replacers to calves prior to weaning. Different options relate to nutrient content, ingredient sources, levels of vitamin and mineral supplementation and others. The multiple bag system is a new twist on the old commodity concept. Associated with using commodities as feed ingredients are increased management required to obtain and manage the commodity, ensuring quality of the commodity, and making sure the product is mixed and fed to the animals properly. The multiple bag system of feeding milk replacers can work - but producers using this system should realize that the lower cost is associated with an acceptance of increased risk on the part of the producer.

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