

Milk replacer label 101

Milk replacers come in a variety of formulations from a variety of manufacturers. With so many different products available, it's important to know what's really in the bag.

The milk replacer you choose should fit your feeding program and help achieve your calf growth goals.

Every milk replacer label will contain a list of the following:

Active drug ingredients

Medications added to milk replacer to treat or control disease will be listed first.

Implementation of the Veterinary Feed Directive (VFD) has changed the way two antibiotics – neomycin and oxytetracycline – can be used. Both antibiotics, commonly added to milk replacer before the VFD, can no longer be added to milk replacer for growth promotion. These antibiotics can still be used for treatment and control; however, medicated milk replacer products require a VFD order issued by your veterinarian.

Other animal health additives will also be listed in this section. Examples include decoquinate or lasalocid to control coccidiosis and feed-through larvacides to control flies.

Guaranteed analysis

This section provides a nutritional breakdown of the contents.

Crude protein and crude fat will be listed first and are often used to describe a milk replacer's formulation. The first number listed represents protein and the second, fat. For example, a 22:20 milk replacer would contain 22 percent crude protein and 20 percent crude fat.

Next on the list is crude fiber, which will vary depending on the protein source. Crude fiber above 0.15 percent indicates a plant protein source. This value should prompt you to review the ingredient list for the presence of plant proteins, which would provide you with the assurance you're buying what you intended. For example, an all-milk product in comparison to one with a soy ingredient.

Calcium (listed as both minimum and maximum contents) and phosphorus (minimum) will be next, and occasionally followed by ash and moisture content. Typical calcium values are 0.75 percent minimum and 1.25 percent maximum with a phosphorus minimum of 0.7 percent.



Ash level indicates the amount of mineral in the product. This level will vary based on the cumulative mineral content of the ingredients in the milk replacer. Ash content is typically between 7 percent and 12 percent in milk replacers. Products at the higher end of this range are not detrimental to calves since they are made with ingredients that are higher in natural ash content.

Moisture content in milk replacer varies from about 2.5 percent to 7 percent and should be closely monitored as it could represent wasted resources. If a product is higher in moisture, you could be paying for added water. For example, a bag of milk replacer with 7 percent moisture has 4 percent less dry matter (and 4 percent more water) than a bag with 3 percent moisture. That's 2 pounds less dry matter and nutritional value in a 50-pound bag of milk replacer.

Vitamins A, D₃ and E round out the list. Additional B-complex vitamins are important for animal health and growth.

Ingredients

Ingredients will typically be listed in descending order according to how much of each ingredient is included in the formulation. However, there may be exceptions to this rule. For example, if a tag shows dried whey as the first ingredient, the current formulation may show dried whey protein concentrate will be a more cost-effective ingredient. Then, dried whey protein concentrate may be included at a slightly higher inclusion than skim milk, but will not be reflective of the rule of thumb for listing ingredients in descending order. This change would not affect the overall nutrition for the animal, but will create a better value for you.

The primary components of the ingredients list are the protein and fat sources. Common sources of protein in "all-milk" milk replacer formulations include whey products and derivatives, skim milk, casein and sodium or calcium caseinate. Alternative proteins include soy products, animal plasma protein, egg protein and wheat or gluten isolate protein.

Typical fat sources used in milk replacers include whole milk fat, lard, choice white grease and soy, palm or coconut oil.

Further down the list are vitamin and mineral supplements, preservatives and flavors. Be sure trace minerals and B-complex vitamins are included.

Check the label on every batch of milk replacer you receive to be sure it contains the formulation, additives and moisture level you expect.

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