



HUNAN PERFLY BIOTECH CO., LTD.

Address: No.1038 Zhongqing Road, Jinxia Economic Development Zone, Kaifu

District, Changsha, Hunan, P. R. China

Tel: +86-731-84699028/84699058/84699158

Fax: +86-731-84699030

Web: <http://www.perfly-bio.com>

V 1.0



PerGluco C60

www.perfly-bio.com

PerGluco C60 is rumen bypass glucose product developed by multi-layer coating of nutrients with anti-ruminal degradable substances. The leading rumen bypass technology ensures that the product can successfully bypass the rumen and be released in the small intestine.

The necessity of adding rumen bypass glucose to ruminant diets

Glucose is one of the important nutrients for animals. Rumen bypass glucose added into ruminant diets can not only efficiently supplement energy needs, but also play a certain role in improving the body's carbohydrate metabolism, improving lactation performance and promoting body health. Almost most of the soluble sugars and starches in ruminant diets are degraded to form volatile fatty acids (VFA) by rumen fermentation, and the amount of glucose directly absorbed in the digestive tract is very small. However, during about 10 days before delivery, dairy cows began to experience loss of appetite, leading to insufficient dry matter intake and insufficient supply of energy and other nutrients. During calving, dairy cows are in a negative energy balance as a result of the calving stress, which causes the reduced immunity and weak disease resistance. Postpartum diseases of dairy cows are frequent, especially retention of afterbirth, paralysis after delivery, etc. Moreover, as the rapid increase in milk production after calving, the need for energy, especially glucose, continues to increase, while the dry matter intake is significantly reduced. The rumen bypass carbohydrates provided by the diet to synthesize glucose are far from insufficient, so dairy cows are usually in a state of negative energy balance during the perinatal period. Negative energy balance will cause the cow's blood sugar to drop, fat mobilization, liver fat deposition, and ketogenesis increase, leading to the occurrence of ketosis or subclinical ketosis. If the negative energy balance state lasts for too long, it will also affect the recovery of the cow's uterus, resulting in the failure of the reproductive function to recover normally, the delay of conception, the decline of reproduction rate, and the serious impact on production performance.

Rumen bypass glucose can increase the absorption and utilization of glucose in the posterior digestive tract, especially the small intestine, so supplementing rumen bypass glucose is an effective way to fundamentally solve the negative energy balance of dairy cows.

[Guarantee Value of Product Ingredients]

Glucose ≥60%, moisture ≤10%

[Feature]

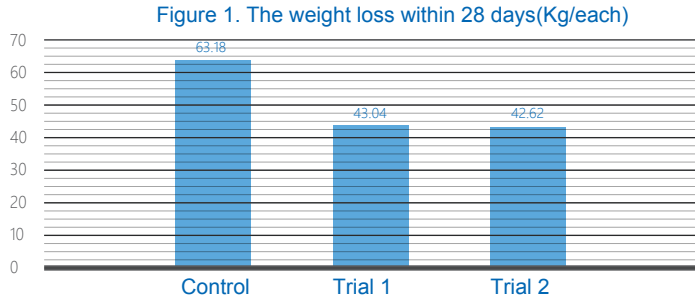
The product particles are even, and the coating is complete, good fluidity, easily mixing, rumen-bypass rate ≥ 87%, release rate in small intestine ≥ 93%.

[Efficacy]

- 1) The product can meet the energy needs of dairy cows during the perinatal period and increase the body's immunity. reducing the occurrence of metabolic diseases such as milk fever, retention of afterbirth, displacement of the true stomach, fatty liver, and ketosis in dairy cows greatly.
- 2) The product can provide the energy demand of dairy cows during the perinatal period, and increase the peak milk yield of dairy cows by 4-5 kg/day/each;
- 3) The product can reduce the postpartum loss of dairy cows, speed up the recovery of dairy cows, increase the conception rate of dairy cows in estrus, and shorten the number of nonpregnant days of dairy cows.
- 4) The product can effectively solve the problem of insufficient energy intake in dairy cows under heat stress, reducing the impact of heat stress on dairy cows greatly.

[Application]

- 1.The effect on the weight of dairy cows in the post-perinatal period (trial1 group: PerGluco C60: 300g/each/day, trial 2 group: PerGluco C60: 400g/each/day)



Compared with the control group, the addition of 300g and 400g PerGluco C60 per head per day can slow down the weight loss of primiparous cows by 20.14Kg and 20.56Kg, which proves that rumen-protected glucose can reduce the mobilization of body fat in postpartum dairy cows.

- 2.The effect on lactation and feed intake during the post- perinatal period

Figure 2. Dry matter feed intake(kg/d/each)

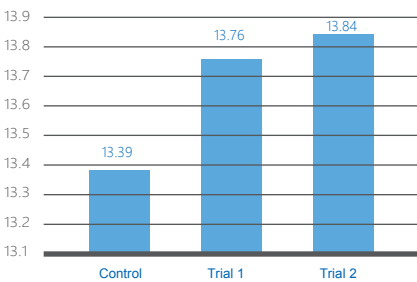
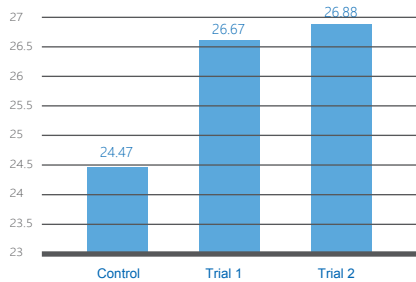


Figure 3. Milk yield (kg/d/each)



Negative energy balance in the early stage of lactation can reduce milk production, and this experiment proves that the addition of PerGluco C60 significantly improves milk production and the maintenance of postpartum lactation; The addition of too much energy substance will cause the dry matter intake of dairy cows to decrease. In this experiment, the dry matter intake of dairy cows in the experimental group showed an upward trend, indicating that the addition of PerGluco C60 did not adversely affect the dry matter intake of dairy cows. It is beneficial to alleviate the negative energy balance of postpartum in dairy cows.

[Usage]

Dairy cows from 7 days before delivery to 60 days after delivery: 200 to 500 g per head per day, or 2%-5% of concentrate supplements.

[Note]

- 1.In order to ensure uniformity in the feed, the use of this product need to be premixed firstly, and then gradually added to the follow-up feed.
- 2.Keep away from heat, moisture and direct sunlight, not with toxic and harmful substances mixed.
- 3.This product is used as soon as possible after unpacking, the remaining parts need to tie up and keep in dark place.

[Package]

This product is packed in boxes or bags, with a net weight of 10kg, 20kg and 25kg per box or bag. Please refer to the package label for details.

[Shelf life]

Under the condition of original package, the shelf life is 12 months.