

Dear Reader,

We have recently completed a number of tests and would like to inform you of the results in this newsletter.

We will address how Runderfit 2.0 works in practice and look at the results that were achieved with Butylin 54 in the broiler chicken industry.

Despite this year having the coldest spring in 40 years, the start of the summer is already fast approaching. That means that temperatures in the barn will increase and feed intake will come under pressure. Heat stress can be reduced. Read more about it in our newsletter.

As usual, we will also be dealing with the fish oil market.

With kind regards,

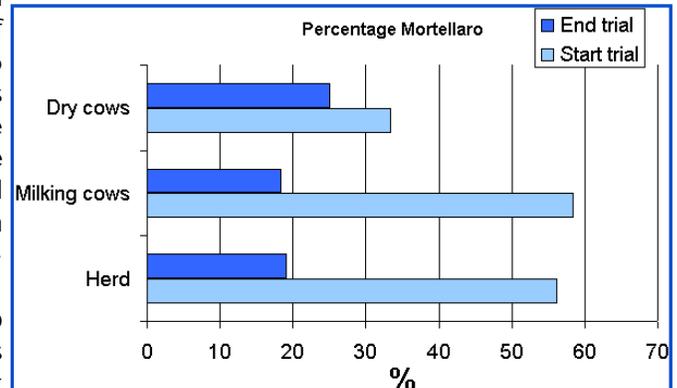
The E.F.S. Team

▶ Reducing Mortellaro disease?

Earlier this year, E.F.S. Holland introduced Runderfit 2.0. The new composition of this product based on various herbs has been adapted to achieve better results more easily. To assess the performance of the product, E.F.S. Holland has conducted a test over the past six months to measure the effectiveness of Runderfit 2.0 on Mortellaro disease.

During this test, each cow was given 25g of Runderfit 2.0 for 16 weeks; a foot bath was not used. The claws were assessed at the beginning and at the end of the test by an independent claw trimmer.

The number of Mortellaro disease cases was reduced by 66% in just 16 weeks. The intensity of the Mortellaro disease cases was also reduced. For more information on this test or the Runderfit 2.0 product, please contact E.F.S.-Holland.

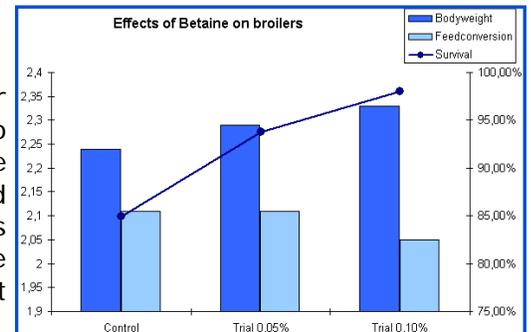


▶ Reducing heat stress in pigs and poultry

Although summer still seems far away, we believe it is important to mention that something can be done about heat stress in pigs and poultry. Reduced feed intake, less milk and reduced fertility are common consequences of heat stress.

In addition to sows, broilers can also suffer from heat stress in the summer. Reduced feed intake directly results in less growth and often results in higher feed conversion.

Research shows that heat stress can be reduced by adding Betaine to animal feed. This is due to Betaine's ability to regulate osmosis. This makes animals less dependent on their own inefficient ability to balance their water levels. As a result, less energy is required for maintenance, leaving more energy apparent for growth and production. The figure below shows the results of a test using broilers.



The broilers were exposed to high ambient temperatures (12 hours at 24°C, 3 hours increasing from 24°C to 37°C, 6 hours at 37°C, and 3 hours decreasing from 37°C to 24°C). The chickens were fed with the same feed, the only difference being the amount of Betaine (resp. 0% (control), 0.05% and 0.10%).

Research has shown that adding Betaine to the feed of chickens infected with *Eimeria* reduces damage to the viscera, as is also apparent from intestinal damage. The figure below shows the results of a test using broilers. One of these advantages is better digestion of nu-

>>Continued on page 2

>>Continued from page 1

trients. It will also result in stronger intestines which will reduce carcass infection in abattoirs as a result of intestinal breakages. A reduction in coccidiosis caused by adding Betaine to feed means that the risk of developing necrotic enteritis (NE) is lower, as the development of NE is linked to the presence of damage caused by coccidiosis (Elwinger et al, 1992).

The product NUTRI-C® has been available from E.F.S.-Holland for quite some time. NUTRI-C® is a sophisticated blend of organic acids enriched with natural Betaine. To guarantee consistent and reliable quality, the raw materials are meticulously selected and monitored. NUTRI-C® was developed specifically for pig and poultry feed. It contains more than enough Betaine to completely replace choline chloride supplements to premix or mixed feed. As the aggressive component choline chloride is not needed, the stability of the remaining feed components is greatly increased. As mentioned above, Betaine improves energy management, as well as liver function (resulting in better use of nutrients), faster growth and shorter recovery times. Furthermore, Betaine increases the proportion of breast meat produced by broilers. Now that summer is fast approaching, you may wish to receive more information about reducing heat stress through NUTRI-C®. If so, please contact E.F.S.-Holland.

► **The fish oil market**

Fish oil prices remain virtually unchanged. The quotas for South America have increased slightly. We hoped to have an even bigger quota, however, as a consequence, and due to the large demand, the price of fish oil remains high. Fish catches in Europe seem to be going in the right direction. Whether this will result in a price reduction remains to be seen. In week 23, prices for South America were \$2500 and for Europe \$2300. In week 11, this was \$2500 and \$2200 respectively.

► **Reach sustainability together**

The world of feedmanufacturing is, as is the agricultural sector, in constant motion. E.F.S.-Holland meets the changing demands by closely monitoring the needs of customers and consumers. Recently, E.F.S.-Holland has, in association with



various partners from the sector as well as partners from surrounding sectors committed itself to a project intending to increase the sustainability of the agricultural sector. More information on this project will follow later this year.

► **Buffered butyric acid: the results**

E.F.S. Holland recently had a test carried out with *Butylin 54* in broiler chickens. *Butylin 54* is a triple buffered butyric acid. The test compared a control feed with a test feed. The test feed was 3% lower in energy and protein and amino acid content. Furthermore, 0.1% *Butylin 54* was added to the control feed. This test was carried out on 162 Ross broilers (day 1 – day 35) divided among 27 cages with an unlimited supply of feed and water.

Despite lower energy and protein levels, we were able to achieve a 3% increase in growth with the test feed. The feed conversion and water intake remained the same, while the feed intake increased slightly (4%),

The results of this test, in combination with tests previously carried out, show that *Butylin 54* ensures more efficient use of the available proteins and energy.

For more information about this test, or about *Butylin 54*, please contact E.F.S.-Holland.

