

## NuStart

Calf rearing is one of the most important elements of successful management on a dairy farm or calf rearing unit. Young calves are facing a lot of challenges during their lifetime. The main focus points in terms of calf rearing are health, rumen development and growth. The natural supplement NuStart, developed by Provimi and now added to its full range of milk replacers, gets young calves off to ‘the start of a lifetime’.

NuStart is a unique combination of essential oils, probiotics, natural antioxidants (Grape PP) and prebiotics. It contains a well-balanced mix of vitamins and trace elements for young calf development.

In repeated trials carried out at Provimi’s research farms all over the world, growth rates and health in calves fed calf milk replacer containing NuStart consistently out-performed the control groups.

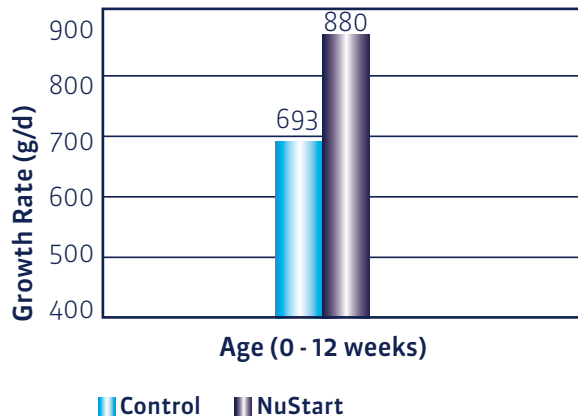
A considerable improvement of feed efficiency is also obtained with NuStart.

*“**NuStart** - A natural performance enhancer, for the start of a lifetime”*



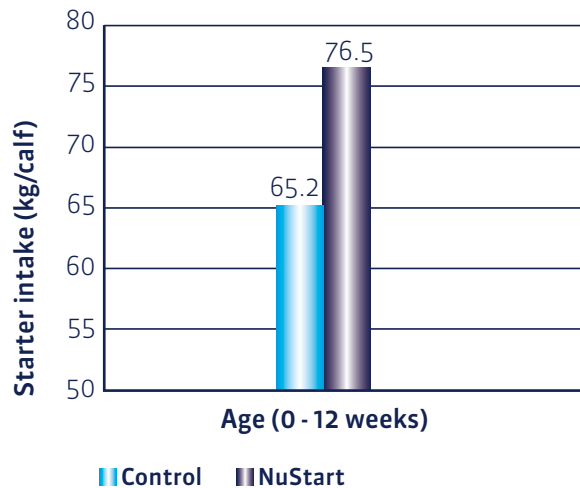
The essential oils in NuStart help to stimulate appetite and kill the non desirable bacteria, while the prebiotic acts as a source of nutrients for the healthy bacteria and therefore aids efficient digestion. The probiotic quickly repopulates the digestive tract with beneficial bacteria. Grape PP is a powerful antioxidant that improves the calf's natural ability to fight disease.

**Figure 1.**  
The benefits of feeding NuStart to your calves



Provimilk with added NuStart improves the digestive process and increases feed intake, which boosts growth rates and improves feed conversion. In a study, 24 male Holstein calves were divided into two equal groups. A milk replacer containing 20% CP and 18% fat was fed during six weeks, combined with ad libitum Muesli starter feed (19% CP) from two weeks of age. In this trial, the calves receiving milk replacer with NuStart had a 27% improved growth rate (Figure 1) and a 17% higher feed intake than the calves receiving the control treatment without NuStart (Figure 2). These results also show the effect of NuStart on efficient utilisation of nutrients. The positive effect of NuStart on starter feed intake also stimulates rumen development.

**Figure 2.**  
The effect of NuStart on starter intake



NuStart benefits both dairy and beef animals. It contributes to meeting the target calving age of two years at the desired weight of 640kg before calving. In beef cattle, it reduces time to finishing. In both sectors, NuStart has a significant impact on profitability.

#### NuStart benefits

- Promotes an optimal, healthy gut flora
- Stimulates the development of the digestive tract
- Decreases oxidative stress
- Improves the calf's ability to fight disease

The effects of NuStart result in a clear decrease of digestive disorders and a stimulation of dry matter intake. Besides that, NuStart improves growth and development and it increases feed utilisation and efficiency.

P.O. Box 5063 3008 AB Rotterdam  
T + 31 (0)10 423 95 00 F + 31 (0)10 484 56 24  
E info@provimi.nl I www.provimi.nl