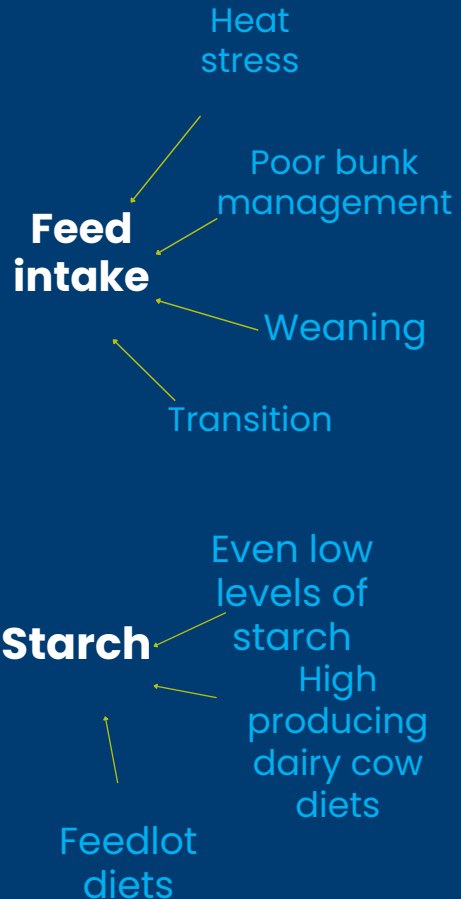
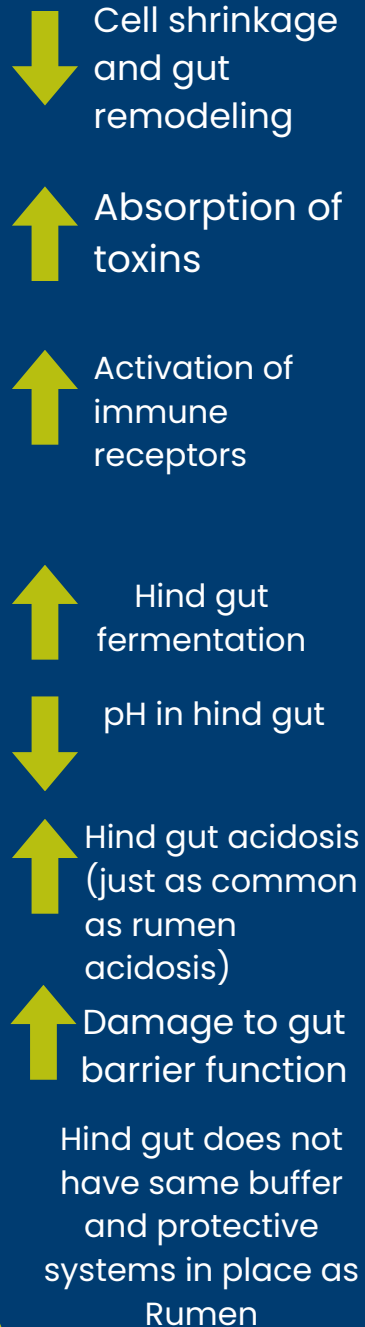


Farm challenges

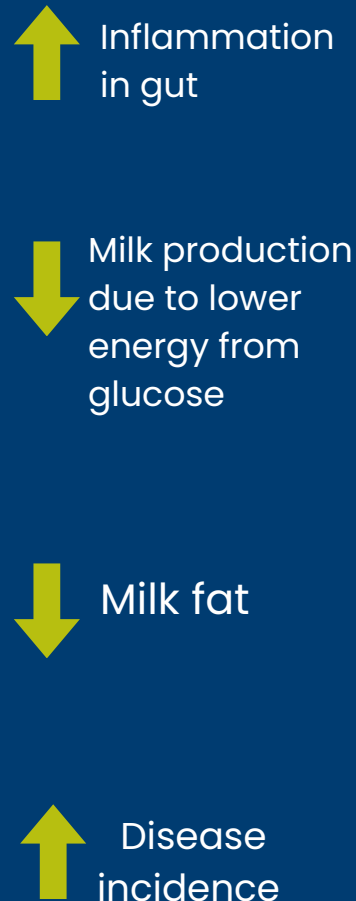


HEALTHYLIFE
SUSTAINABLE LIFETIME PERFORMANCE

What happens in the gut



How does it affect the animal



The solution - Lactibute

- Prebiotic
 - ↑ In Acid utilizing bacteria
 - ↓ Acid producing bacteria
 - ↑ Hind gut pH
 - ↑ Production of butyrate
 - ↑ Gut wall integrity
 - ↑ Cell junctions
 - ↓ Acid producing bacteria
 - ↓ Inflammatory response
- Dosage (per animal)
 - Dairy = 16g
 - Beef = 8g
 - Sheep = 4g
- Cost per animal
- R x/kg (dosage/1000)
- Takes 3 weeks for full effect once included

How the animal benefits



trouw nutrition
a Nutreco company

FAQ

•Why is immune receptors in Hind gut important?

Hind gut receptors responsible for 70% of Immune response in animals

•Why is the hind gut more sensitive to lower pH?

Hind gut has thin layer of cells thus little protection; No buffering mechanisms; Plenty of immune receptors in comparison to Rumen which is able to manage pH better

•Will Dairy meals with low Starch also have hind gut acidosis?

Data shows even rations low in starch (as low as 17% starch) experience hind gut acidosis. Any bypass fermentable matter (good quality grass etc) will provide material for acid production by hind gut micro organisms

•Why does milk production drop when inflammation in hind gut increases?

Inflammation uses Glucose as main energy component. Mammary glands also use Glucose for milk production. Thus inflammation competes with available glucose for milk production. NB!! 40l of milk requires 3kg of glucose. Inflammation can use up to 1kg of glucose (in extreme cases)

•How does lactibute improve milk production?

Lower inflammation reduces competition for Glucose, more available for milk production

•How does lactibute improve milk fat?

During stress and early lactation, NEFA (dietary and body fats) used as energy sources. Thus More de novo fats used for milk fat (de Novo = use of carbohydrates etc to make milk fat). This is less efficient than using preformed fats such as NEFA (dietary and body reserves). When lactibute reduces glucose loss due to inflammation more energy is available and less derived from fats. Thus more preformed Fats available for milk fat production, which is more efficient

•Why use a prebiotic?

Only effective way to bypass the rumen and deliver an effective product to hind gut

•Why not use Sodium butyrate?

Unprotected Na Butyrate will not reach hind gut, will be used in rumen. Protected na Butyrate will help gut wall but not have effect on Hind gut pH. Lactibute more wide reaching in its effect in hind gut

•When do I feed lactibute?

Effective for consistent use

•If I have to prioritize specific times to feed lactibute?

Critical for transition period, high and medium producing, to save cost can be removed during low producing and far off dry cows