

# **PRO EARTH FEED**

#### **Ruminant Gut Health Supplement**

Pro Earth Feed is a highly effective and transformative supplement solution scientifically formulated for the dairy industry to improve the gut health and performance of ruminant livestock. This innovation in feed science combines active probiotic bacteria and enzymes with key marine ingredients to reduce emissions, increase milk production, and improve animal health and efficiency. The active coefficient ingredients in the Pro Earth Feed Science work synergistically to transform the rumen microbiome. Pro Earth Feed increases feed bio-efficacy and redirects energy away from methane production to alternate biochemical pathways that enhance vital functions such as milk production, animal health, reproductive function, and immunity.

Agricultural livestock emissions account for a significant percentage of Australia's current carbon emissions footprint. By incorporating Pro Earth Feed powder daily into the existing diet of ruminant animals, farmers can improve animal performance and reduce methane livestock emissions, reduce manure methane and nitrous oxide emissions and support sustainable Australian farming practices, naturally.

Commercial dairy cows with high milk production require a high level of daily feed intake. This basal diet causes a significant level of fermentation in the rumen, leading to the production of methane, which has detrimental effects on both the animal's productivity and health, as well as impacting the environment. Pro Earth Feed's unique formulation contains selected marine species, bacteria and microbes that accelerate the breakdown and absorption of nutrients, while optimising the rumen pH and improving the fermentation pattern.

Pro Earth Feed delivers superior results to farmers and reduces the impact of dairy farming on the environment. The supplement directly targets the rumen microbiome, reducing the abundance of methanogenic bacteria and redirecting energy to other pathways, generating higher milk yields, improved thyroid and reproductive function and reduced disease. Pro Earth Feed reduces the incidences of ruminant diseases such as mastitis, rumen acidosis, and ketosis and increases herd immunity. The feed supplement improves the quantity and quality of the milk produced with increased levels of fat and protein content, decreased bacterial cell count and longer shelf life.



#### **Pro Earth Feed Top 10 Benefits**

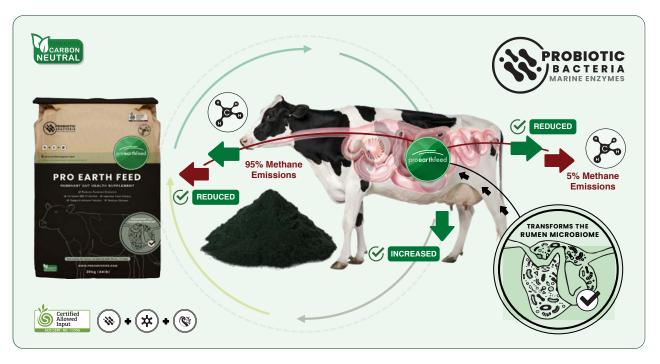
- + Decreases methane emissions by est. 75% Diverts metabolic hydrogen away from methanogenesis
- + Increases milk production by est. 6L daily
  Improves feed bio efficacy, rumen pH and fermentation pattern
  alters the biochemical pathway of milk production
- + Enhances milk quality (fat and protein content)
  Redirects energy and increases nutrient availability
  enhances the concentration of milk fat and protein
  improves the fatty acid profile and increases shelf life
- + Improves animal health and immunity
  Reduces instances of mastitis, rumen acidosis and ketosis,
  improves immunity, thyroid function and reproductive health
- + Increases energy bio-efficiency
  More energy available for milk production and reproductive health
- + Improves FCR feed efficiency by est. 15%

  More efficient use of feed nutrients and energy utilisation resulting in less feed required and higher absorption rates
- + Increases nitrogen utilization
  Improved nitrogen utilisation and decreased nitrogen excretion
- + Reduces ammonia emissions
  Enhanced microbial biomass in the rumen results in lower ammonia absorption and excretion
- + Improves animal welfare (reduces discomfort)
  An improved and more balanced population of rumen
  microorganisms improves animal welfare by reducing the
  instance of disease, acidosis and diarrhea which causes
  animal pain and discomfort
- + Supports sustainable milk production
  Reduces the environmental impact of dairy farming



# PRO EARTH FEED SCIENCE

#### The Science of the Pro Earth Ruminant Gut Health Formula



# **METHANE**

Methane, a potent greenhouse gas, is primarily produced during enteric fermentation in the rumen of ruminants. Pro Earth Feed's key ingredients improve the rumen microbiota modifying the fermentation pattern, which diverts metabolic hydrogen away from methanogenesis toward alternative biochemical pathways and functions. This results in reduced methane production while contributing to superior outcomes in milk production and animal health.

- + Diverts metabolic hydrogen from methanogenesis
- + Causes cell death of methanogens
- + Increases propionic acid levels reducing hydrogen
- + Promotes efficient use of nitrogen & reduces ammonia

# MILK

Milk production is a complex biochemical process dependant on numerous factors, a key factor is feed intake, which is fermented in the rumen. Pro Earth Feed alters the biochemical pathway of milk production by improving rumen fermentation, increasing fat and protein production in milk and improving nutrient utilization. The supplement contains live probiotic bacteria and active marine ingredients which increases the absorption of minerals and optimizes the pH of the rumen.

- + Increases fat & protein content & quantity of milk
- + Diverts energy to bio-pathways increasing production
- + Increases nitrogen utilisation & iodine content in milk
- + Increases no. of Lactococcus & lengthens shelf life

# HEALTH

Pro Earth Feed improves ruminant gut health, immunity, and reproductive health. It contains a unique combination of marine ingredients including live probiotic bacteria that stabilizes the pH of the rumen, reduces the risk of metabolic disorders like acidosis and ketosis. The supplement targets bacteria that causes mastitis and E.coli, reducing the occurrence of the infection, improving immunity and overall animal health resulting in increased milk production and reproductive function.

- + Modifies the rumen microbiota & neutralises the pH
- + Reduces instances of mastitis & pathogenic bacteria
- + Reduces the risk of rumen acidosis and ketosis
- + Improves animal immunity & reproductive function

# **<b>⊗** FEED

Pro Earth Feed enhances feed bio efficacy in ruminants by modulating the rumen microbial community, resulting in increased nutrient absorption and energy availability. The formula acts as a catalyst, forming complexes between dietary lipids, which leads to increased adsorption efficiency preventing their premature nutrient excretion. Pro Earth Feed's beneficial bacteria and enzymes reduces instances of rumen acidosis and other diseases improving feed efficiency resulting in increased energy.

- + Modifies & improves microbial community in the rumen
- + Diverts hydrogen to alternative biochemical pathways
- + Enzymes help breakdown complex carbohydrates
- + Increases FCR, nutrient availability & adsorption

