

MAXFERM/PRO

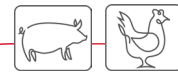
UNLOCK YOUR PROTEIN



MAXFERM/PRO is a dried fungal fermentation product produced by fermentation of plant substrates with fungi to increase nutrient digestibility and animal performance. In addition, MAXFERM/PRO contains functional components that strengthen gut integrity.

IMPROVES NUTRIENT DIGESTIBILITY

MAXFERM/PRO solutes cells of protein-rich feedstuffs and releases proteins from the colloidal system of cytoplasm and cell wall structures. In addition, MAXFERM/PRO removes branched sugar-protein complexes and increases the degradation of non-starch polysaccharides. The multifactorial impact of MAXFERM/PRO increases total tract digestibility allowing to reduce dietary crude protein content and nitrogen excretion. Furthermore, *in vitro* results showed that MAXFERM/PRO has a faster wound healing effect of intestinal cells strengthening gut integrity.



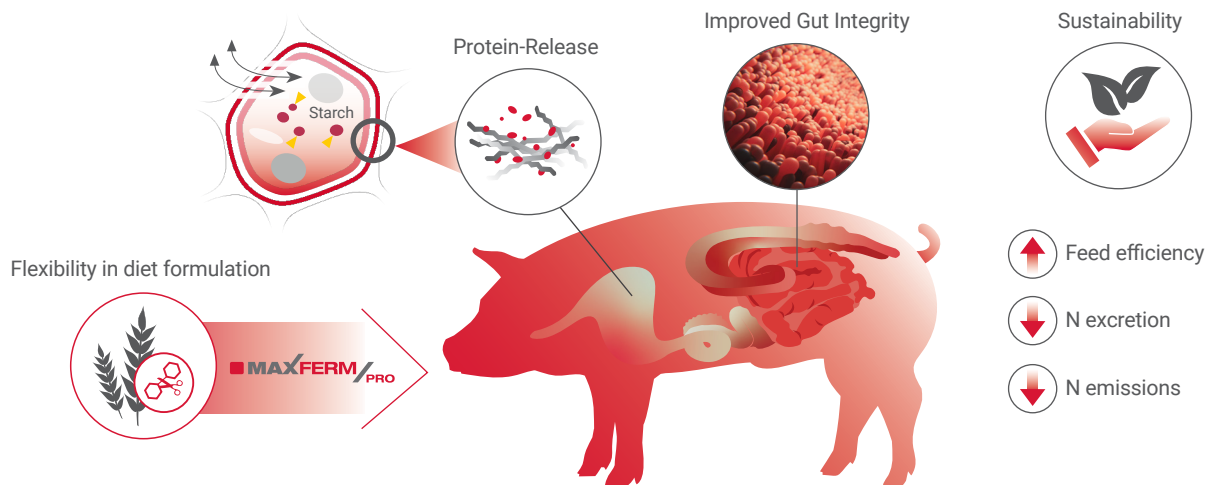
CHARACTERISTICS

- Postbiotic effect
- Increased protein release
- Support gut integrity

APPLICATION BENEFITS

- Flexibility in diet formulation
- Matrix values upon request
- Reduced nitrogen excretion

F1: Mode of action of MAXFERM/PRO.

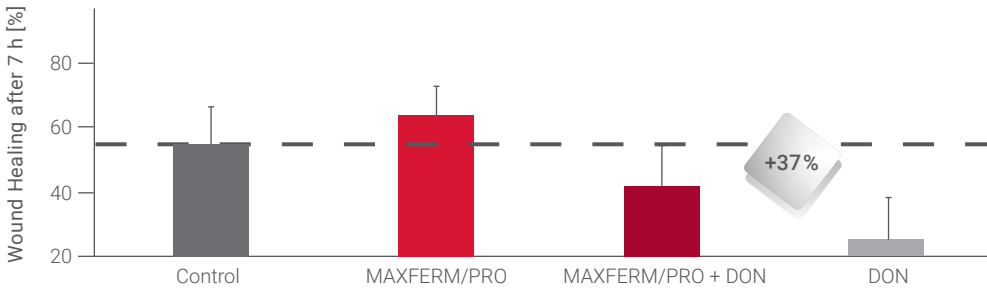


HOLISTIC APPROACH FOR IMPROVED GUT INTEGRITY

Model: IPEC-J2 cell culture; n=6
Treatments: (1) Control; (2) MAXFERM/PRO (5,000 ppm); (3) MAXFERM/PRO (5,000 ppm) + deoxynivalenol (DON; 0.5 ppm); (4) DON (0.5 ppm)
 → Incubation for 24 hours (h) before wounding
Methods: Wound gap measurement (image software; % wound healing after 7 h); scratch to simulate wound



F2: Wound healing of intestinal cells after 7 h of creating the wound.



Source: Senzyme, 2023.

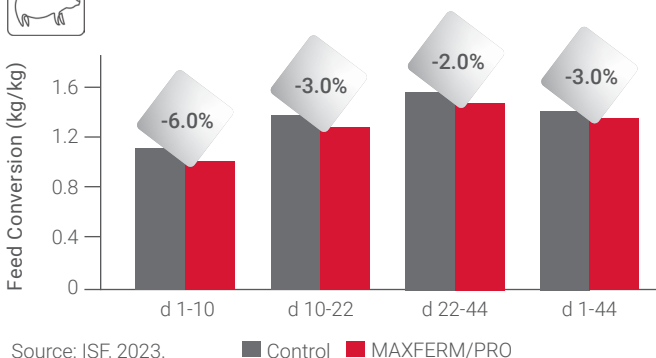
Wound healing was numerically greater for MAXFERM/PRO + DON than for DON (F2). In addition, wound healing was numerically greater for MAXFERM/PRO than for all other treatments. **MAXFERM/PRO promotes wound healing of intestinal cells *in vitro*, thereby probably gut integrity.**

IMPROVED FEED CONVERSION IN PIGLETS

Animals: Piglets (N=1,561), weaned at 25 days of age (initial BW 6.3 kg)
Treatments: (1) Control (highly digestible diet, exogenous NSP-degrading enzymes); (2) Control + MAXFERM/PRO (500 ppm)
 3-phase feeding program
Methods: Performance (BW, n=46; feed intake, n=23), morbidity



F3: Feed conversion of piglets.

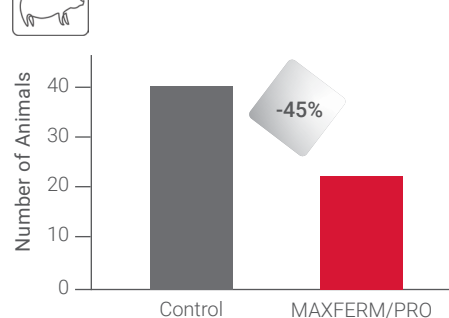


Source: ISF, 2023.

■ Control ■ MAXFERM/PRO



F4: Medical treatments¹ of piglets.



¹Streptococcus infection, joint inflammation.

The feed conversion ratio was numerically lower for MAXFERM/PRO than Control for all three phases and during the complete trial (d 1-44). During the trial, the number of animals receiving medical treatment was 45% lower for MAXFERM/PRO compared to Control. **MAXFERM/PRO improves growth performance in piglets. In addition, MAXFERM/PRO reduces the number of medical treatments, probably by supporting gut integrity.**