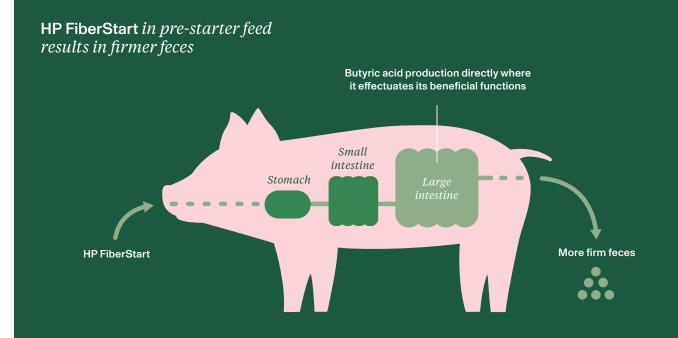


**HP FiberStart** removes the need for ZnO in nursery feed to promote firm feces and maintain the same growth performance.

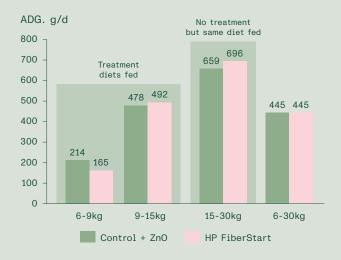
Pharmaceutical levels of ZnO is widely used in nursery feed to prevent and treat diarrhea. ZnO improves intestinal barrier function, reduce pathogen bacteria proliferation and boost the immune system.

Fermentable fibers modulate the underdeveloped microbiota to drive the production of organic acids. Supplying beneficial bacteria in the lower gut with fermentable fibers increase butyric acid production by 19% in weaning piglets.

Production of butyric acid directly in the lower gut takes advantage of all beneficial outcomes of butyric acid on intestinal villi development, gut epithelial integrity, and anti-inflammatory functions. The results from these desirable effects alleviate the weaning transition, replaces ZnO while maintaining the same optimal growth performance.



## Piglets fed **HP FiberStart** and those fed pharmaceutical levels of ZnO perform equally



**Figure 1.** Average daily gain post weaning when fed iso-energetic diets containing 18% crude protein; control (2500 ppm ZnO) and HP FiberStart (no ZnO).

Statistical power = 89% and expresses the sensitivity of the test. As power increases, the measured benefits of HP FiberStart become more pronounced.

### Benefits

- $\checkmark$  Feces consistency is firmer
- $\checkmark$  19% higher butyric acid production
- Favorable fermentation and organic acid production

## Product description

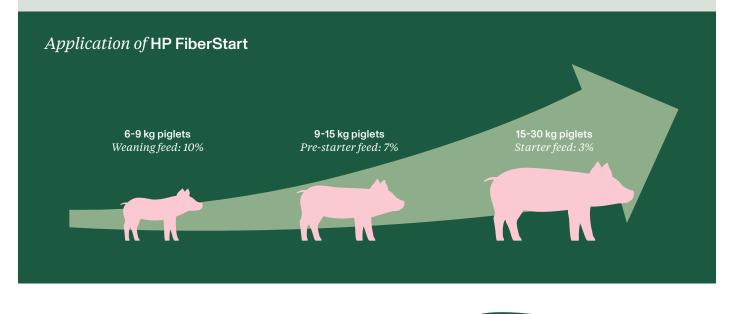
HP FiberStart is enzymatically co-processed protein and fiber raw materials used in nursery feed where alternatives to therapeutic use of ZnO is needed. The nutrient composition is 42% crude protein and 13% crude fiber. Soluble NSP comprises 7% of the total NSP content, making the fiber fractions fermentable even in weaning piglets.

### Product features

- Combination of inert and fermentable fiber components
- $\checkmark$  Rich in digestible protein
- $\checkmark$  Low content of anti-nutritional factors

# Recommended use of HP FiberStart in nursery feeds

Recommended inclusion rate of HP FiberStart is 10% in weaning feed (6 - 9 kg piglets), 7% in pre-starter feed (9 - 15 kg piglets) and 3% in starter feed (15 - 30 kg piglets). Diets are balanced with other ingredients to meet animal requirements for energy and nutrients.





Healthy Animals - Healthy Business hamletprotein.com