

Building A Better Animal

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PhD
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SMALL BUT BIG IMPACT FOR YOUR CUSTOMERS



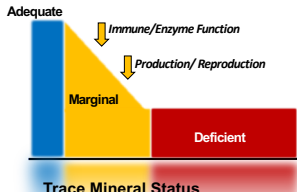
| Category | Percentage |
|----------|------------|
| Energy | 90% |
| Protein | 8% |
| Minerals | 1% |
| Other | 1% |




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MEETING TRACE MINERALS REQUIREMENTS FOR PERFORMANCE

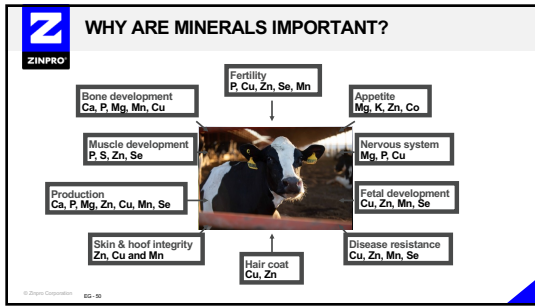


Adequate
↓ Immune/Enzyme Function
↓ Production/Reproduction
Marginal
Deficient
Trace Mineral Status

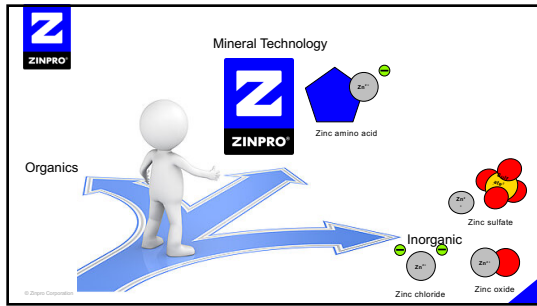


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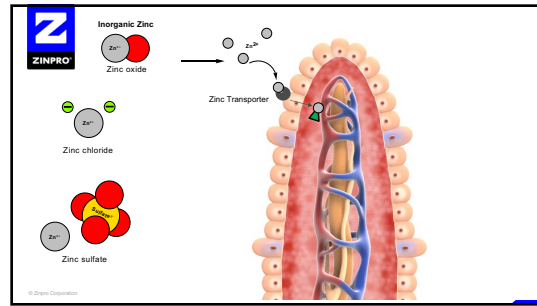
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4



5



6



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Z
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AMINO ACID TRANSPORT

V.I.P
ENTRANCE

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Z
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Inorganic Zinc
 Zn^{2+}
Zinc oxide

Zinc chloride
 Zn^{2+}

Zinc sulfate
 Zn^{2+}

Zinc Transporter

Zinpro complex

Amino Acid Transporter

Z
AVAILA
MINS

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Z ABSORPTION VS METABOLISM
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Absorption:
Getting into the body

Metabolism:
Post absorption
responses
Getting used by the body

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The diagram consists of two rounded rectangular boxes. The left box is light blue and contains the text 'Absorption: Getting into the body'. A black arrow points from this box to the right box, which is dark blue and contains the text 'Metabolism: Post absorption responses Getting used by the body'.

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**PERFORMANCE
ANIMAL HEALTH**

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The slide features the Zinpro logo in the top left corner. The main text 'PERFORMANCE ANIMAL HEALTH' is centered on the slide in a large, bold, blue font.

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Z EPITHELIAL TISSUE: FIRST LINE OF DEFENSE
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The slide features the Zinpro logo in the top left corner. To the right of the logo is a shield icon with a blue cross inside. Further to the right is a microscopic image of epithelial tissue, showing a layer of cells with a distinct surface and underlying structures.

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Z OVERCOME CHALLENGES MORE QUICKLY

ZINPRO With Zinpro Zn in Feed

Lesion Prevalence
100% vs 33%

Severity Score
1.3 vs 0.3

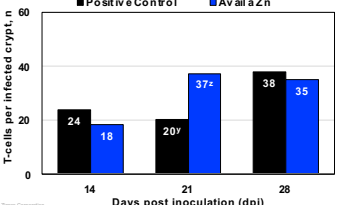


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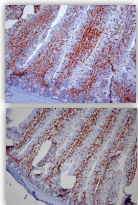
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Z SUPPORT HEALTH WITH ESSENTIAL NUTRITION

ZINPRO Availa® Zn Impact on Local Immune Response



| Days post inoculation (dpi) | Positive Control | Availa Zn |
|-----------------------------|------------------|-----------|
| 14 | 24 | 18 |
| 21 | 20 | 37 |
| 28 | 38 | 35 |

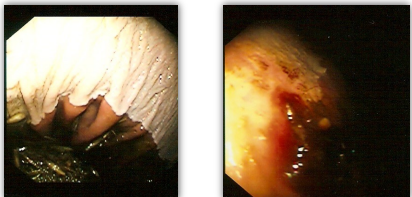


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50% Reduction in Gastric Ulcers

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ZINPRO **TRACHEAL EPITHELIUM**

75% Decrease in Airsacculitis 10 d Post-Challenge with IBV

ZINPRO AVAILA Zn

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Healthy Feet

Are a Foundation for Success

ZINPRO

Zinpro® Availa® Sow delivers powerful post-absorptive effects to help your sows achieve their best performance.

Unlock the full potential of your pigs and business.

© Zinpro Corporation

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ZINPRO **HEALTHY CLAW/PAWS: FOUNDATION FOR SUCCESS**

| | |
|--------------------------------|----------------------------------|
| 35% Dairy Lameness | 30% Beef Footrot |
| 29% Poultry Lameness | 29% Swine Claw Lesions |



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ZINPRO® 4[®]PLEX INCREASES IMMUNITY IN FOALS

40% Increase in Mare Colostrum IgA Concentration

65% Increase in Foal Serum IgA Concentration


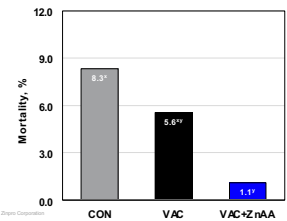



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ZINPRO® POST ABSORPTIVE EFFECTS IMPROVE LIVABILITY

Zinpro® Availa® Zn and vaccine impact on mortality

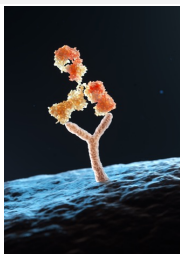
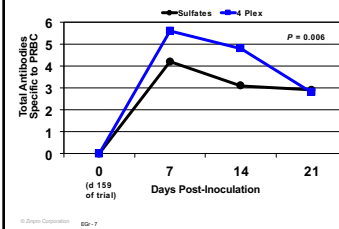



| Group | Mortality (%) |
|----------|---------------|
| CON | 8.3% |
| VAC | 5.6% |
| VAC+ZnAA | 1.1% |

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ZINPRO® TOTAL ANTIBODY TITERS IN GROWING HORSES





| Days Post-Inoculation | Sulfates | 4 Plex |
|-----------------------|----------|--------|
| 0 (d 159 of trial) | 0 | 0 |
| 7 | ~4.2 | ~5.5 |
| 14 | ~3.5 | ~4.8 |
| 21 | ~3.2 | ~3.5 |

P = 0.006

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PERFORMANCE

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ZINPRO YEAR-ROUND COW-CALF BENEFITS




20 Reproductive Improvement (%)
28 IgG Colostrum (%)
28 Weaning Weight (lb)

7 g/head/d


- ✓ Bull Semen Characteristics
- ✓ First Service Retention Rates

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Maximize breeder **performance** with trace minerals backed by rigorous research and in-field observations that will validate your formulations:





Profitability: Increased ROI **13:1**

Cooled Eggs: Decreased by **1.4%**





Fertility and Chick Livability: Increased by **1.8%**

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Experience improved broiler **performance** and **productivity** with Zinpro® Performance Minerals® that will validate your formulations:

| | | | |
|---|---|---|---|
|  |  |  |  |
| Improved by | Strengthened by | Reduced by | Reduced Up to |
| 2 pts. | 30% | 33% | 29% |


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MORE FULL VALUE PIGS
Brazilian Production System, 3200 pigs/treatment



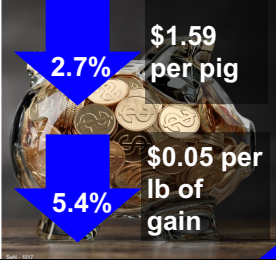

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Don't Make Mortality
The cost of doing business



The cost of nursery mortality can be significant. System health and throughput is essential for achieving animal wellbeing and productivity.




2.7% **\$1.59 per pig**
5.4% **\$0.05 per lb of gain**

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KEY BENEFITS OF FEEDING ZINPRO® AVAILA® DAIRY

| | |
|---|--|
| 28% Increase in Colostrum IgG Concentration | 20% Lower Somatic Cell Count |
| 5.5% Point Increase in Pregnancy Rate | 9% Greater Feed Efficiency |




AVD 136
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Top of Their Game

| | |
|--|---------------------------------------|
| 28% Sole Depth | 9% Mane Hair Growth |
| 22% Robust Inflammatory Response | 63% Joint Function Recovery |



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BETTER HEALTH THROUGH

NUTRITION

Z
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PERFORMANCE



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