



### The First Isotonic Protein Drink for Pigs

From day 2 of life, help your pigs thrive as they transition through key production milestones.

### What is Tonisity Px?

Tonisity Px is the first isotonic protein drink that feeds the pig's gut from day 2 of life

# How does Tonisity Px differ to other products?

Tonisity Px helps pigs transition through key production milestones by supporting the enterocytes of the small intestine. This leads to the following long-term benefits;



<sup>1</sup> Tonisity Tech Bulletin PX-18-01

<sup>2</sup> Data on File, Study Report TON-18-051

### **A Good Gut Feeling**

Tonisity Px consists of a number of key ingredients that encourages the development of the enterocytes of the small intestine so that it works at peak performance.

### What's the Big Deal with Enterocytes?

Enterocyte cells are the final gateway for the absorption of all nutrients into the bloodstream.

By targeting the enterocytes, Tonisity Px helps to stimulate and boost the growth of the small intestinal villi enabling them to better absorb nutrients into the bloodstream.

#### **Development of Small Intestine in First 3 Weeks of Life**



Total Surface Area Doubles by Day 10



Number of Enterocyte Cells Doubles in First 3 Days of Life



Original Length and Surface Area Triples by Day 21

#### The Tonisity Px advantage over Control Group<sup>3</sup>:

<sup>3</sup> Data on File, Study Report 16-004

#### **Pre-weaning:**

- ✓ 8.3% higher villi height
- 9.0% more intestinal mucosal thickness

#### **Post-weaning:**

- ✓ 16.9% higher villi height
- 10.6% more intestinal mucosal thickness

### Farrowing Stage: A Key Opportunity to Improve Survivability

#### Provide to piglets during days 2 - 8

Dosage – 500ml / litter / day (40ml / piglet / day)



Use the enclosed Tonisity International scoop to measure one level 15g scoop per 500ml of fresh water (for 1kg bags) or two level 155g scoops per 10L of fresh water (for 5kg bags).

In a study on a 7,200 sow farm in USA (weaning from 15 to 22 days of age), Tonisity Px given days 2-8 **reduced pre-weaning mortality by 1/3** (10.3% vs. 15.1%, P = 0.03) and **boosted body weight in the first 3 weeks post-weaning by 9.3%** (9.9kg vs 9.0kg, P = 0.06).<sup>4</sup>

<sup>4</sup> Tonisity Tech Bulletin PX-18-01

### Supports a Strong Healthy Start to Life

Give Tonisity Px from days 2-8 to support a healthy gut from the word go.



A meta-analysis of 60 trials across Europe, Asia and the USA, involving 125,575 piglets, shows an average of 20% reduction in pre-weaning mortality vs. controls (9.7% vx. 12.1%).<sup>5</sup>

# This equals +0.32 pigs per litter or +0.75 piglets per sow per year.

### Weaning Programme

Pour the Tonisity Px solution on top of the dry feed, or prepare a gruel, for at least 3 days before weaning.

#### Ratio

Approximately one litre of Tonisity Px solution for each kilo of dry feed

#### Quantity

Pre-weaning, target a quantity of 500ml of solution per litter per day or 40ml of solution per piglet per day on top of feed or in a gruel

If possible, supply the Tonisity Px solution 3 days after weaning (Up to 100ml per piglet/day)



#### **Mixing Instructions**

For Liquid/On Top of Feed

The Tonisity Px solution can also be used to prepare a gruel to encourage feed intake after weaning. To prepare 20kg of gruel, mix 10L of Tonisity Px solution with 10kg of dry feed and give 20kg gruel per 100 pigs per day for 2-3 days.



Drv Feed







Tonisity Px Solution

Tonisity Px Gruel

### **Ensure Steady Growth** with Fewer Fall Behinds

The first week after weaning can be particularly challenging. This study shows the Tonisity Px advantage.

Piglets receiving the Tonisity Px Solution in a pan from days 2-8 and on top of feed at weaning gained 28% more weight than the control group during the first week post weaning (Days 21 to 28).



# The Result

Pigs drink more which encourages greater feed consumption and weight gain. Tonisity Px provides the necessary energy boost and hydration required during the stressful weaning phase.

### Sows and Piglets Can Benefit from Tonisity Px

Tonisity Px not only provides microenteral nutrition to neonatal and weaning pigs but can also be used as a top-dressing on sow feed to increase productivity.

Supplementing sow feed with 3% Tonisity Px solution in the pre-farrowing and pre-weaning stages resulted in increased weaning weights at 21 days.<sup>6</sup>

Sows given Tonisity Px prior to farrowing and weaning are better able to withstand the stress of these stages. The benefits can be seen in their piglets.

Increased weaning weight

**Reduced pre-weaning mortality** 



**Tonisity Px** 

Increased sow feed intakeReduced antibiotic usage

## Healthy Pigs Help Lower Costs

#### 63% Reduction of Antibiotics<sup>6</sup> Piglets from Sows Treated with Tonisity Px



Piglets from sows given Tonisity Px prior to farrowing were **3.75 times less likely to receive antibiotics** than those from sows that did not receive Tonisity Px.

### Fewer Antibiotics Mean





Less Cost



Less

Labour

## **Environmental or Transport Challenges**

During transit, pigs are exposed to stress (space restrictions, travel conditions and transit time), which can affect their overall health and well-being.

Tonisity Px can be used to provide support and hydration during these stressful periods to ensure pigs arrive in the best possible condition.





Use before and after transport to facilitate a faster transition to normal feeding behaviors upon arrival.

#### **Pre-transport:**

Give newly weaned pigs up to 100ml of Tonisity Px solution per pig per day for 2 days before transport begins, and 2 days after arrival

#### **Pre-slaughter:**

For finished pigs destined for slaughter, give 100ml of liquid Tonisity Px solution per 10kg liveweight, prior to transport.

# Reduce the Impact of Disease Challenges

U.S. herd with a particularly severe PRRS outbreak

Tonisity Px pigs given solution before and after 12-hour transport

Post-weaning mortality during the 6 weeks after arrival of 5.18% for pigs receiving **Tonisity Px** was significantly lower than the 13.85% mortality in the Control group (P < 0.001).<sup>7</sup>





When faced with a challenging situation like a move to another location, disease outbreak or production challenge,

pigs will recognise and eagerly consume Tonisity Px.

<sup>7</sup> Tonisity Tech Bulletin PX-18-03

### **Use Tonisity Px**

Put Tonisity Px to work on your farm or your client's operation

For more information, or to order Tonisity Px: T: +353 (0)1 902 0026 > E: orders@tonisity.com W: tonisity.com



