

# **SEL-PLEX**®

# The superior source of organic selenium





#### What is selenium?

Selenium is an essential trace mineral for animals and people. It acts as a powerful antioxidant and plays a critical role in:



**Immune health** 



Reproduction



Mitigating oxidative stress



**Growth development** 

Selenium deficiency is related to various diseases in animals and humans, along with decreased growth and reproductive performance in pigs. As such, meeting animals' selenium requirements is one of the key factors in achieving optimal production efficiency and producer profitability and in providing consumers with a nutritious source of protein.

#### Alltech's proprietary form of selenium yeast

Sel-Plex is Alltech's proprietary organic form of selenium yeast. It offers an excellent source of dietary selenium provided in a very similar form to the selenium found naturally in organic plant matter. Research has shown that optimizing selenium nutrition in the diets of food animals increases the efficiency of fertility and meat production. More importantly, it improves the quality and nutritive value of these products.

### **Selenium form drives efficiency**

Evidence from the last three decades of research indicates that the form in which dietary selenium is delivered is key to its efficiency. This has led to an industry shift toward less toxic, more effective organic forms of selenium and a movement away from sodium selenite, which has long served as the traditional form of selenium supplementation.

Selenite's high toxicity, negative interactions with other minerals, possible contamination with heavy metals, poor bioavailability and overall safety concerns have caused the industry to reexamine its use.

While newer, chemically synthesized forms of selenium are now being marketed to the feed industry, the available research and regulatory data indicates differences in terms of performance improvement and stability within feed and premix while having toxicity values closer to that of selenite.

The selenium from Sel-Plex® is better able to meet the higher requirements of modern livestock, which are raised to meet stringent growth, reproductive performance and health standards.

# Why SEL-PLEX®



#### **PROVEN**

Sel-Plex was the first FDAreviewed form of organic selenium and was the first strainspecific form to be EU-approved for all species.



#### **TRACEABLE**

Sel-Plex is manufactured. packaged and sold by Alltech, which uses highly controlled manufacturing processes and quality control methods.



#### RESEARCH

Supported by more than 30 years of research, Sel-Plex is the most studied and proven form of organic selenium available.



#### **BIOAVAILABLE**

The selenium in Sel-Plex is better absorbed, stored and utilized by the animal when compared with inorganic selenium, helping boost the body's defense system.



#### **LOWER TOXICITY**

Sel-Plex organic yeast has relatively few, if any, toxicity concerns for humans or



#### **COMPLETE**

Sel-Plex is designed to completely replace all supplementary organic and inorganic selenium sources in the diet.

## BENEFITS OF SEL-PLEX®



## **Sows and Piglets**

Selenium supplementation is linked to:









Reproductive performance support

Viability in piglets More piglets per sow per year

Optimized piglet growth rates



The transfer of selenium in colostrum, milk and placenta results in a higher selenium status and tissue reserves in piglets

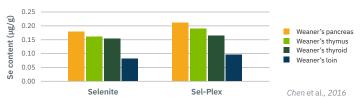
Figure 1. Effect of dietary Se source on the reproductive performance of sows



#### Effect of organic selenium on weaned piglets per sow per year

more live piglets compared to control

Figure 2. Effect of Se source in sow diets on the Se status concentration of weaning piglets



# **Grower/Finisher Pig**

Selenium supplementation is linked to:





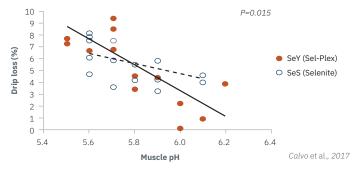


selenium retention

**Improved** Better health

Optimized meat quality (e.g., loin color and drip loss)

Figure 3. Drip loss (%) as affected by dietary treatment and muscle pH



Contact your local Alltech representative or email KnowYourMinerals@Alltech.com to learn more about Alltech's Mineral Management solutions.