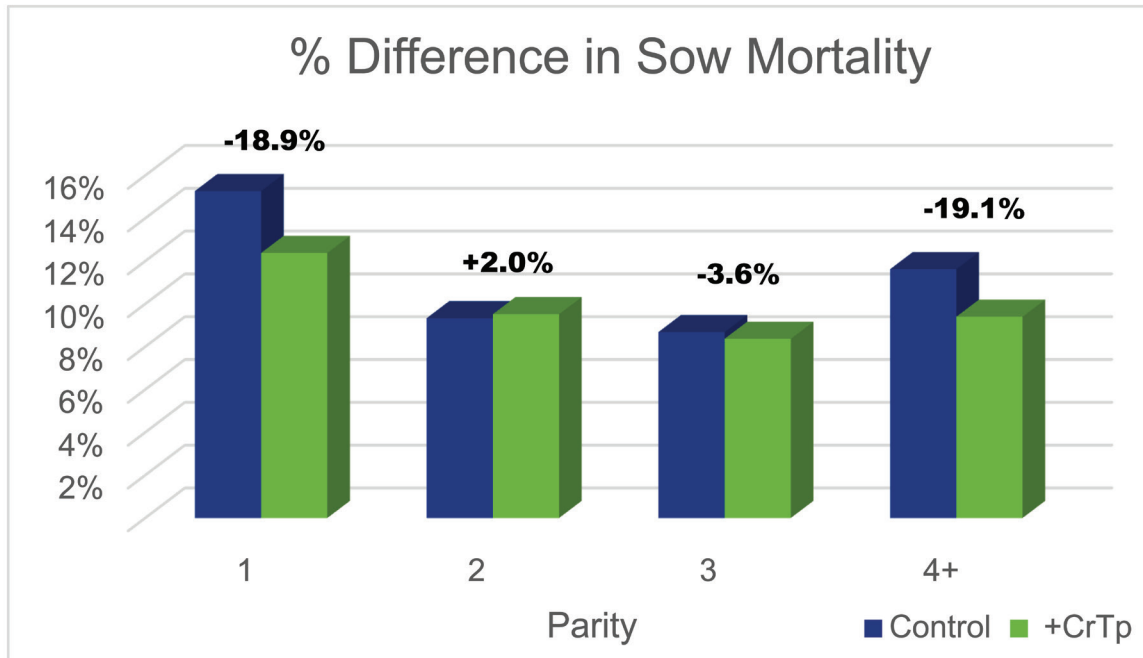
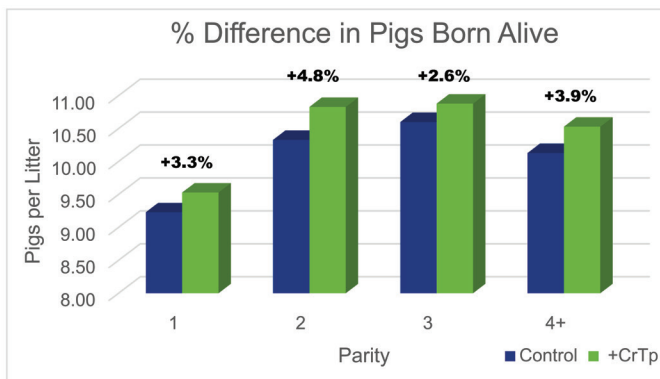


# Chromium Supplementation in Sow Diets

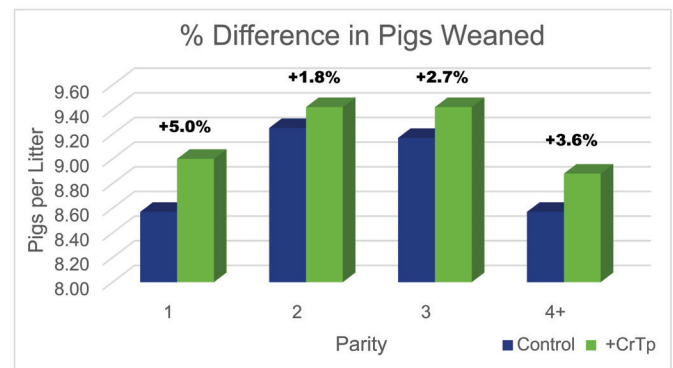
Sow mortality is arguably the most significant challenge in swine production today. Operations are losing sows at unsustainable rates, bringing significant financial and productive loss.



Total Mortality ( $P = 0.11$ )  
 Combined Sow Mortality: 10.95% (Control) vs. 9.38% (+CrTp)  
 Hagen et al., 2000



Pigs Born Alive per Litter ( $P = 0.02$ )  
 10.05% (Control) vs. 10.42% (+CrTp)  
 Hagen et al., 2000



Pigs Weaned per Litter ( $P = 0.02$ )  
 8.75% (Control) vs. 9.08% (+CrTp)  
 Hagen et al., 2000

In the study above, dietary supplementation of 200 ppb chromium tripicolinate (CrTp) had a positive impact on number of pigs born alive and weaned, and sow mortality.<sup>1</sup> Cr supplementation has been extensively researched in sow diets for its benefits in helping improve insulin sensitivity and glucose metabolism.<sup>2,3</sup> Sows' ability to control blood glucose levels is lower during pregnancy, which could influence higher rates of newborn pig mortality.<sup>4</sup>

1. C.D. Hagen, M.D. Lindemann, and K.W. Purser. Effect of Dietary Chromium Tripicolinate on Productivity of Sows under Commercial Conditions. Swine Health Prod. Vol 8 (2000) 59-63.
2. Anderson, R.A. and A.S. Kozlovsky. Chromium intake, absorption and excretion of subjects consuming self-selected diets. Am. J. Clin. Nutr. Vol. 41 (1985) 1177-1183.
3. Amolkon, E.K., J.M. Fernandez, L.L. Southern, D.L. Thompson, T.L. Ward, Jr. Effect of chromium tripicolinate on growth, glucose tolerance, insulin sensitivity, plasma metabolites, and growth hormone in pigs. J. Anim. Sci. Vol. 73 (1995) 1123-1130.
4. Kemp B., Soede N.M., Vesseur P.C., Helmond F.A., Spoorenberg I.H., and Frankena K. Glucose tolerance of pregnant sows is related to postnatal pig mortality. J. Anim. Sci. Vol. 74 (1996) 879-885.

Supplementing Cr at 200 ppb  
has been shown to help:

**Sow  
Mortality<sup>1,2</sup>  
Stillborn &  
Mummied<sup>3</sup>  
Abortions<sup>1</sup>**

**Live Pigs  
Born<sup>3</sup>  
Total Piglets  
Born<sup>3</sup>  
First-Service  
Farrowing  
Rate<sup>1,4</sup>**

1. Campbell, R.G. The effects of chromium picolinate on the fertility and fecundity of sows under commercial conditions. (1996) Proc. Of the 16th Annual Prices Feed Ingredient Conference, Quincy, IL.  
2. Evans, G.W. and L. Meyer. Chromium picolinate increases longevity. Age, Vol 15 (1992) 134.  
3. C.D. Hagen, M.D. Lindemann, and K.W. Purser. Effect of Dietary Chromium Tripicolinate on Productivity of Sows under Commercial Conditions. Swine Health Prod. Vol 8 (2000) 55-63.  
4. D.E. Real, J.L. Nelsen, M.D. Takach, R.D. Goodband, S.S. Dritz, J.C. Woodworth, and K.Q. Owen. Additive effects of L-Carnitine and chromium picolinate on sow reproductive performance. Livestock Science Vol. 116 (2008) 63-69.

Chromium propionate & tripicolinate  
trace mineral products



**Average  
Investment**  
less than



per sow per year

**Estimated  
ROI**

**5:1 \***

Based on economic analysis of  
Hagen et al., 2000.

\*Not a guarantee of performance.

Manufactured in the USA

Feeding Rate: 200 ppb



Scan for additional  
product information