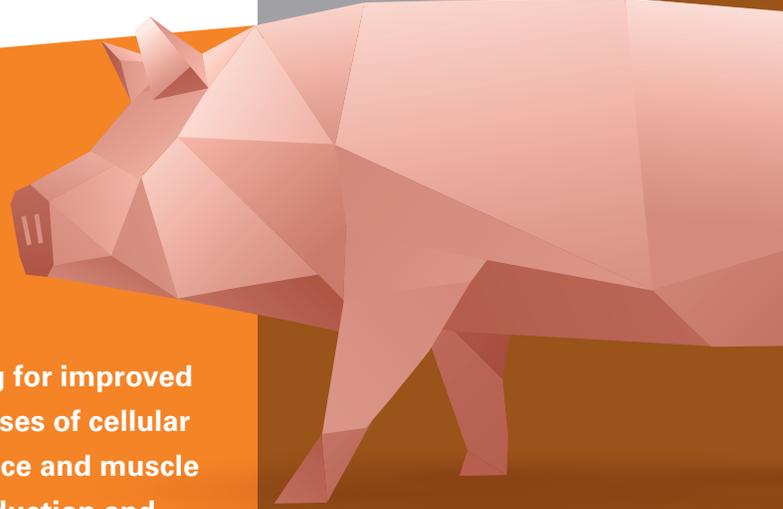


OPTIMIZE REPRODUCTIVE PERFORMANCE

KemTRACE®
CHROMIUM
Essential to you and your operation.

KemTRACE® Chromium — the first product of its kind on the market — is a safe, proven trace mineral for use in swine. This highly bioavailable, organic source of chromium propionate increases mobilization of blood glucose into tissue, allowing for improved performance in the pig's hierarchy of needs. Key uses of cellular energy for swine include reproduction, maintenance and muscle or fat deposition. The net benefit is increased production and profitability in your operation.



ROLE OF CHROMIUM IN REPRODUCTION

Chromium propionate increases mobilization of blood glucose into tissue for improved animal performance during reproduction. Studies have shown chromium propionate in gestation and lactation feeds can result in:



IMPROVED
sow body condition¹



FEWER
non-productive sow days²



HEAVIER
weaned pigs^{3,4}



DECREASED
pre-weaning mortality⁵

Depending on the pig's need, chromium supplementation can result in greater feed intake and improved body condition, particularly as it relates to combatting stressors.

In sows, **improved body condition allows for more energy to be utilized** for other production parameters.



KEMIN IS COMMITTED TO QUALITY AND SAFETY

Kemin knows chromium. Only Kemin has invested more than 20 years and millions of dollars toward scientific research, validating the benefits of chromium propionate while bringing this essential trace mineral to millions of pigs around the globe.

KEMIN

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800-752-2864

INCREASING PIGS WEANED AND WEAN WEIGHTS³

Increasing the number of pigs weaned, wean weights and decreasing non-productive sow days are key performance criteria for today's commercial swine operation. Studies evaluating first and second reproductive cycles show chromium supplementation can result in increased wean weights.

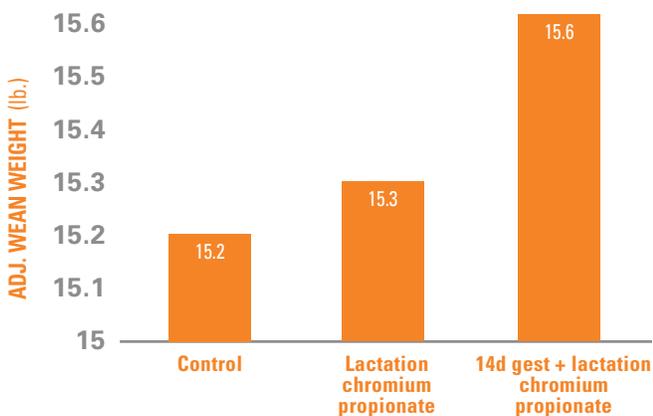


Figure 1: Wean weights during first reproductive cycle ($P < 0.07$).

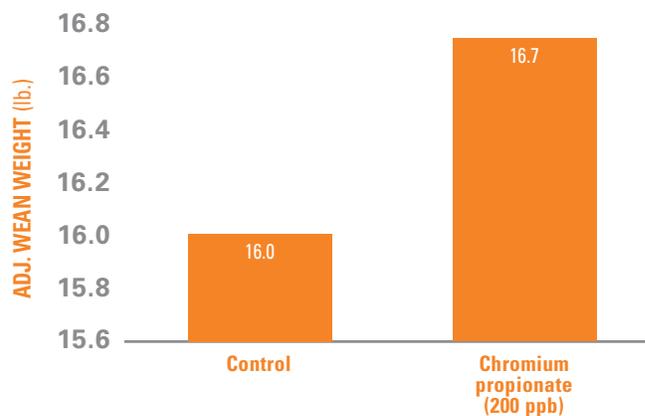


Figure 2: Wean weights during second reproductive cycle ($P < 0.001$).

The studies also showed that sows were able to maintain productivity without negatively impacting body condition, as measured by back fat. During the second reproductive cycle, sows within the treatment group had greater ($P < 0.001$) back fat than those in the control group. This indicates that chromium made it possible for more of the energy taken in during the reproductive process to be directed to production needs. This is similar to chromium studies that have been conducted in dairy cows (McNamara and Valdez, 2005), indicating a comparable impact across species.

Table 1: Farrowing and back fat analyses during the second reproductive cycle.

Performance		FEED REGIMEN			TREATMENT		
		Chromium (200 ppb)	Non-medicated (control)	SE	Difference (Cr-control)	($P <$)	SED
Farrowing	Litter birth weight, lb.	45.6	43.9	0.631	1.7	0.05	0.859
	Born live/sow	13.0	12.4	0.221	0.6	0.02	0.295
Back fat	Back fat, pre-farrow, mm	20.2	20.1	0.269	0.1	0.8	0.364
	Back fat, post-farrow, mm	19.5	18.6	0.254	0.9	0.01	0.344
	Difference in back fat, mm	-0.7	-1.6	0.177	0.92	0.001	0.237



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