

CHROMIUM FOR REPRODUCTION

Increase reproductive efficiency in your herd with KemTRACE® Chromium

Reproductive efficiency is the foundation for success in your herd. Poor reproductive performance is costly to the cow and your bottom line. Providing your herd with the tools necessary to achieve reproductive success is pivotal to the profitability of your operation.

HOW KemTRACE® CHROMIUM WORKS

**ACTIVATES INSULIN
RECEPTORS**



**MORE GLUCOSE
ENTERS CELL**



**MORE ENERGY
AVAILABLE**

Insulin acts as a “key” that unlocks the cell “door,” allowing blood glucose to enter and be used for energy. Chromium improves insulin function and results in a more efficient clearance of glucose from the blood to the cell, leading to more cellular energy where your cattle need it.

What can your cow do with more energy? Energy in the cow is partitioned according to her biological hierarchy of needs (Figure 1). Biologically, the cow will conserve energy for maintenance, growth, and lactation before reproduction. In healthy animals, the mode of action of chromium allows the cow to more efficiently utilize energy for all production functions, increasing energy availability for reproduction.¹



Figure 1

IN RECENT STUDIES^{2,3}, KemTRACE CHROMIUM HAS BEEN SHOWN TO:



AI PREGNANCY RATE BY 10.6%²



DOMINANT FOLLICLE SIZE³



ESTRUS EXPRESSION²



CORPUS LUTEUM (CL) VOLUME³

SEE THE DATA >

KemTRACE® CHROMIUM AND REPRODUCTION

Two studies were conducted at Virginia Tech University to investigate the effects of KemTRACE Chromium supplementation on reproductive performance of spring-calving cows. In study 1, cows either received a common free-choice mineral (Control, n = 464) or the common free-choice mineral with KemTRACE Chromium (Treatment, n = 489).

*Denote graphs for AI pregnancy rate and estrus expression for study 1. In study 2, cows either received 1 kg/hd/d of a soy-hull based pellet (Control, n = 30); or 1 kg/hd/d of a soy-hull based supplement containing KemTrace Chromium (Treatment, n = 32). **Denote the graphs for dominant follicle size and CL volume from study 2.

Artificial Insemination Pregnancy Rate*

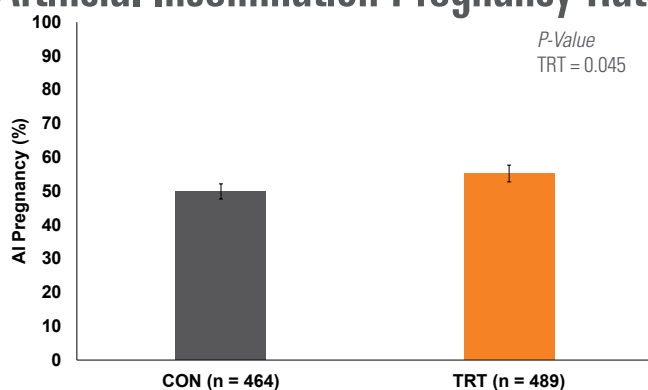


Figure 2

Estrus Expression*

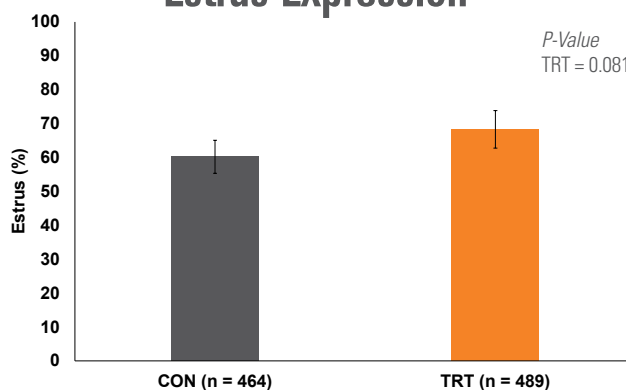


Figure 3

Dominant Follicle Diameter**

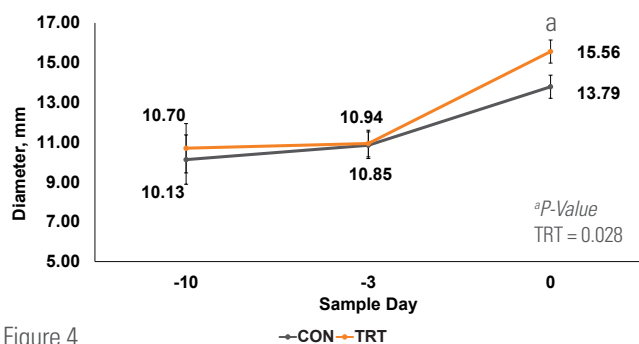


Figure 4

Corpus Luteum Volume**

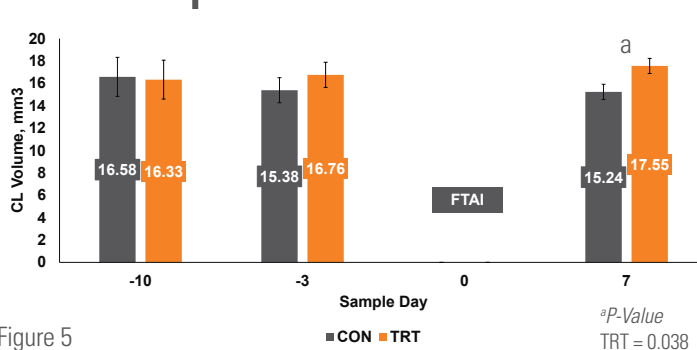


Figure 5

KemTRACE Chromium facilitated more efficient clearance of glucose into the cell, and as a result improved reproductive metrics such as artificial insemination pregnancy rate, estrus expression, dominant follicle size and corpus luteum volume. Chromium supplementation to the breeding herd is essential for reproductive success.

KEMIN
Compelled by Curiosity™

KemTRACE®
CHROMIUM

kemin.com/chromium-beef

REFERENCES

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