

CHROMIUM FOR DAIRY META-ANALYSIS

Kemin conducted a thorough meta-analysis of 16 peer-reviewed scientific journal articles that evaluate the impact of chromium supplementation in dairy cattle. The findings not only confirm the benefits of chromium, but also provide a comprehensive statistical analysis of the advantages in production and profitability that dairy producers stand to gain.

Table 1: Summary of meta-analysis

	ITEM	Chromium, mg	Control	Chromium	Difference	SEM	P-Value
	Dry matter intake, lb.	8.49	39.01	41.17	2.16	0.244	< 0.001
	Milk, lb.	8.91	75.52	78.94	3.42	0.344	< 0.001
Components	Fat, %	8.04	4.11	4.06	-0.05	0.062	0.432
	Protein, %	8.62	3.08	3.04	-0.04	0.019	0.033
	Lactose, %	7.76	4.71	4.72	0.01	0.026	0.609
Yields	Milk fat, lb.	7.88	2.91	3.06	0.15	0.009	< 0.001
	Milk protein, lb.	8.24	2.58	2.67	0.09	0.017	< 0.001
	Milk lactose, lb.	7.96	3.88	4.12	0.24	0.024	< 0.001
	Body weight change, %	10.06	-10.34	-8.11	2.23	0.919	0.02

But what's the likelihood of achieving results on your operation?

98.5%

PROBABILITY THAT DMI WILL INCREASE BY 1 LB./HD/D

99.9%

PROBABILITY THAT MILK YIELD WILL INCREASE BY 1 LB./HD/D

96.9%

PROBABILITY THAT MILK YIELD WILL INCREASE BY 2 LB./HD/D

70.9%

PROBABILITY THAT MILK YIELD WILL INCREASE BY 3 LB./HD/D

The probability of achieving a positive response with chromium supplementation and, ultimately, a positive return on your investment is

100%.



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SUMMARY

Harris, T. L., J. E. Hergenreder, D. J. Dickson, and M. D. Sellers. 2019. Effects of additional bioavailable chromium on dry matter intake, milk yield, and component production: a meta-analysis. American Dairy Science Association Annual Meeting, Cincinnati, Ohio. Abstract W179.

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