

Micro-Cell GOLD Research Summary

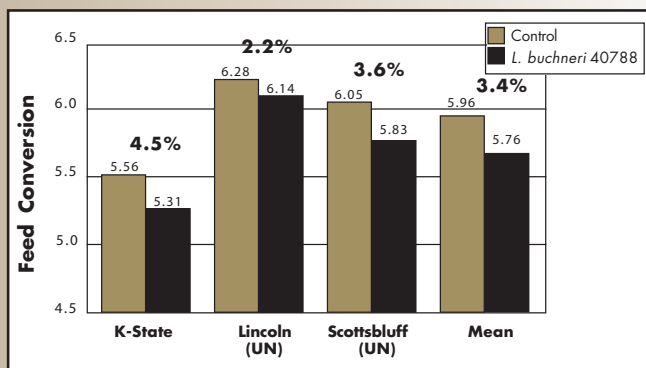


MICRO-CELL® GOLD is a proprietary blend of *Lactobacillus acidophilus* BT1386 and *Lactobacillus buchneri* 40788 formulated to add value to modern beef cattle diets.

Since its introduction in 1994 as a direct-fed microbial, *Lactobacillus acidophilus* BT1386 in **MICRO-CELL®** has built a firm reputation of improving animal performance and profitability in feedyards. Over 20 controlled studies prove it. Additionally, three university trials conducted with *Lactobacillus buchneri* at Kansas State University, University of Nebraska-Lincoln, and University of Nebraska-Scottsbluff have shown improvements in weight gain and feed conversion. Large commercial feedlots have also verified these animal performance benefits.

FEED EFFICIENCY

Data from university controlled studies at Nebraska and Kansas State have shown an average improvement in feed conversion of 3.4%. This improvement between control groups and *Lactobacillus buchneri* fed groups is shown below.



For a given weight gain, this improvement in feed conversion would represent a reduction in feeding costs of over \$1.88 per head. **This conversion improvement consistently exhibited in university trials represents a 5:1 return on investment to the cattle feeder.**

AVERAGE DAILY GAIN

Controlled research trials at several universities in the High Plains consistently found improvements in average daily gain. In a trial at Kansas State University,



cattle fed *Lactobacillus buchneri* gained weight 5.8% faster than the control group (control group 3.47 lbs/day; *Lactobacillus buchneri* group 3.67 lbs/day). After a 126 day trial period, cattle fed *Lactobacillus buchneri* were 22 lbs. per head heavier. Assuming a price of \$65 per cwt, live weight value was increased by \$14.30 per head for the cattle fed *Lactobacillus buchneri*. **Along with reduction in feed costs, this represents an increase in value of over \$16 per head.**

Beneficial gastrointestinal bacteria are vital to a healthy animal. *Lactobacillus acidophilus* BT1386 has proven gut attachment characteristics, inhibitory action against bacteria detrimental to the animal and it establishes and maintains beneficial hindgut microflora in ruminants. In numerous scientific trials involving more than 4,500 head of cattle, *Lactobacillus acidophilus* BT1386 fed for the first 30 days of feeding reduced mortality by 0.39% and medication costs by \$0.20 per head. In many of these studies, reductions in morbidity and railer percentages were also recorded.

FEED CONVERSION

Feed conversion is a key factor affecting the level of profitability in a feedyard. Trial work at several locations has shown that feeding *Lactobacillus acidophilus* BT1386 **improves feed conversion by an**



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average of 4.85%. Over a 28 day period, this represents a reduction in feeding costs of >\$1 per head. **The return on investment through improved feed conversion alone was over 4:1.**

