



USING INDIVIDUAL AMINO ACIDS TO BALANCE BEEF DIETS

PLS uses a unique approach that balances amino acids to energy, **allowing producers to maximize feed efficiency and minimize cost of gain.**

Ingredient Composition (%) of diets fed to heifer calves

	Control	Lysine	Lysine Arginine
Corn	74.5	75.36	77.75
Soyhulls	10	10	10
PLS GroFin 40	5	5	5
Protein	10.5	9.64	7.25

620 Lb heifer calves were purchased and used in this study.

The two objectives were to determine:

- 1) If more closely aligning lysine and arginine ratios improved growth performance
- 2) If high levels of supplemented amino acid reduced growth performance

The ability to use liquid or low-inclusion dry supplements would increase the application of this approach to more beef producers.

High average daily gain doesn't mean calves will be over finished.

Scan the QR code below with a smartphone camera to see a video of the heifers at the end of this study.



Growth Performance of Calves Fed Diets Differing in Amino Acid Inclusion

	Protein	Lysine	Lysine Arginine	P <
Feed Intake, Lbs As Fed	23	22.9	21.8	0.06
Daily Gain, Lbs	5.24	5.5	4.75	0.13
Feed to Gain	4.39	4.16	4.56	
Initial Body Weight, Lbs	684	673	666	
End Body Weight, Lbs	940	944	898	
Lysine, % Supplied	97	98	106	
Arginine, % Supplied	102	100	106	

RESULTS

We can deduce that using amino acids in combination with protein feeds is a credible approach to balancing diets to meet amino acid requirements.