

# Novimet®

## Proven Source of Rumen-Protected Methionine

Methionine is typically the first-limiting amino acid in dairy cattle diets. Inadequate availability of this essential building block can restrict the formation of proteins needed for milk, muscle, and metabolism. Methionine is also a critical methyl-donor, and deficient supplies can negatively impact fat metabolism, the availability of key antioxidants, RNA and DNA methylation, and metabolic regulation.

Methionine requirements can be met by either increasing dietary crude protein or through supplementation. However:

- ✓ Overfeeding protein is expensive, inefficient, and increases N excretion.
- ✓ Unprotected methionine sources are readily degraded in the rumen, before they can be used by the cow or heifer.
- ✓ Not all rumen-protected methionine sources perform equally.

### Novimet®: The Basics

- **Novimet®** contains 50% DL-methionine.
- The methionine in **Novimet®** is 73% rumen bypass, with 93% intestinal digestibility.
- Rumen protection is via microencapsulation within a specific fat matrix.
- **Novimet®** is free-flowing, non-hygroscopic, water insoluble, and heat stable to 144°F.

#### FORMULATION VALUES

Methionine, %	50.0
Fat, %	43.0
Ash, %	4.4
NEI, Mcal/lb	7.7
Crude protein (CP), %	27
Soluble Protein, A, % of CP	4.7
Slowly Degradable Protein B, % of CP	60.8
Undegradable Protein C, % of CP	34.5
RUP, % of CP	76.3
RDP, % of CP	23.7
Total tract undigestible protein, % of CP	6.7
Digestible RUP, % of CP	69.6

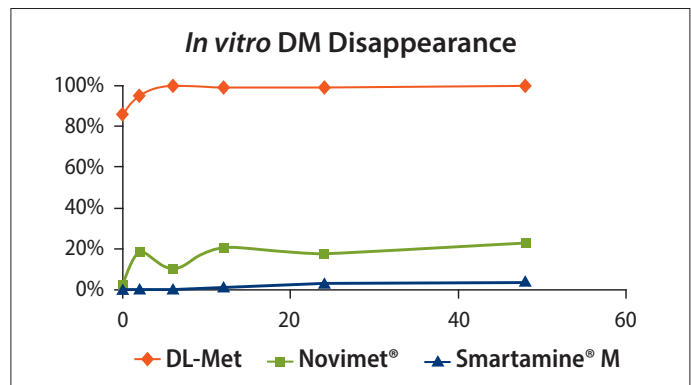


### Novimet®: Value

Innovad® is a leader in microencapsulation technology. The **Novimet®** coating was developed as a specific blend of degummed and refined palmitic, stearic, myristic and lauric fatty acids, researched and tested for the optimum balance of stability, rumen bypass, and intestinal bioavailability.

**Novimet® contributes more than methionine to the ration. The fat from the coating is digested in the lower tract, serving as a source of valuable supplemental fatty acids and energy (NEI = 7.7 Mcal/lb). The fat delivered in a 40 g dose of Novimet is worth more than 2 1/2 cents at current prices.**

The level of rumen protection offered by **Novimet®** has been tested and validated through various protocols at multiple research and testing sites. Data collected both *in vitro* and *in situ* confirm that **Novimet®** delivers an equivalent amount of digestible methionine to the intestine as major competitors, typically at a lower price point.



# Published research with **Novimet**<sup>®</sup>

## Holstein Heifers Fed Novimet<sup>®</sup> plus Novilyls<sup>®</sup> Yielded More Milk, FCM, and Components with Improved Milk Efficiency

**Recap:** Two hundred Holstein heifers received either a standard corn silage, corn, and canola meal-based total mixed ration (TMR), or the same diet with the addition of 10 g of **Novimet**<sup>®</sup> and 100 g of **Novilyls**<sup>®</sup> (rumen-protected lysine) for 60 days post-calving. University researchers conducted the study on a 2,500-head commercial dairy.

Heifers were housed in a ventilated free-stall barn bedded with rubber pads, fed three times per day for ad libitum consumption, and milked three times daily. Milk yield and feed consumption data were collected daily, and components were analyzed once a week.

Animals were individually weighed and body condition scored at the beginning and end of the trial.

Animals receiving the protected amino acids yielded nearly 5 additional pounds of milk (68.2 vs 73.0 lb) and fat-corrected milk (FCM; 62.9 vs 67.7 lb) while increasing fat percentage and maintaining the same level of dry matter intake (DMI). This resulted in greater yields of components (14% more milkfat, 17.8% more true milk protein, and 11.3% more lactose) and an 0.04 improvement in the Milk:DMI ratio. These heifers also tended to lose less body condition.

Gulgun & Sucu, 2022

	Control	Treatment	Difference	% Change
Milk yield, lb	68.2	73.0	4.8	7.0%
FCM, lb	62.9	67.7	4.8	7.6%
DMI, lb	No difference; average 48.5			
Milk:Feed	1.38	1.42	0.04	2.9%
Milkfat %	3.77	3.87	0.10	2.7%
Milkfat yield, lb	2.57	2.93	0.36	14.0%
True protein, lb	2.13	2.51	0.38	17.8%
Lactose yield, lb	3.28	3.65	0.37	11.3%



### Feeding rates

Lactating dairy cows: 5-80 g/h/d  
Beef cattle: 5-20 g/h/d  
Lactating goats/sheep: 3-10 g/h/d

### To learn more

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