

# MHA® FEED ADDITIVE: THE ORIGINAL METHIONINE HYDROXY ANALOGUE (HMTBa)

For nearly 40 years, Novus International, Inc. has conducted groundbreaking research with the HMTBa molecule to demonstrate its value as a methionine source in dairy cows.

There are more than 60 published research studies with HMTBa, the active ingredient in MHA® Feed Additive, showing a deep history of proven benefits to dairy cow performance.

### Studies show the following benefits in cows fed HMTBa

- ✓ Maximize milk fat percentage by up to 0.3% (130g pounds per day)¹
- Increase rumen microbial protein production<sup>2</sup>
- Highly available source of dietary methionine<sup>3</sup>
- Increase 1kg milk yield per day<sup>4</sup>
- Improve transition cow performance<sup>4</sup>

#### **Risk of Milk Fat Depression** 4.0 3.8 +0.51\* 3.6 +0.31 3.4 +0.82\* Milk Fat, % 3.2 3.0 MHA®, High Cows 2.8 Control, High Cows 2.6 2.4 2.2 Low Moderate High 2.0 28 14 35 49 Time, days \*P<0.05 Control ■ MHA® Baldin et al., 2018







#### A METHIONINE SOURCE YOU CAN TRUST



Consistent 84% methionine activity is maintained by stringent quality standards as required by FAMI-QS, GMP+, ISO-9001 and SFSF across all NOVUS facilities



MHA® Feed Additive is a low-dust, granular material that blends uniformly in most rations and mineral blend



Our methionine manufacturing facility and supply chain team are based in the U.S., bringing quality products with 24/7 customer service

## HEAR WHAT LEADING DAIRY INDUSTRY PROFESSIONALS HAVE TO SAY ABOUT MHA®

"We have consistently seen in our experiments that HMTBa decreases risk of diet-induced milk fat depression."

-Kevin Harvatine, PhD, Penn State University

"Putting cows on MHA® has resulted in a quick and noticeable butterfat response in the tank every time. This gives my clients confidence that it will net a profit for them and continue to bring value to the dairy."

**Nutritionist - CO, TX** 

"As a long term supporter of MHA®, I would absolutely recommend it to any nutritionist looking to constantly enhance their milk fat performance. With the improvements my customers see when using MHA, it's an ingredient that I can believe in and trust."

**Nutritionist - BC** 

"MHA® consistently delivers exceptional results. It's my first choice for methionine in lactating and pre-fresh diets."

**Nutritionist - Western NY** 

"MHA® is a must-have ingredient in 100% of the adult dairy cattle diets that I formulate. Rarely, in my 30 years as a practicing dairy nutritionist, have I encountered a nutrition product that provides such a consistent benefit at such an affordable price. MHA®... is an essential nutrient that allows us to optimize component yield. Unlike feed additives that might aid in digestion efficiency or nutrient conversion, MHA® helps meet an actual nutrient requirement. I lock it in and build the rest of the diet around it! Strongly recommended for maximizing milk component outcomes."

**Nutritionist - Central NY** 

#### References

 $^{1}$  Baldin et al., 2018;  $^{2}$  Feng et al., 2018;  $^{3}$  Zanton et al., 2014;  $^{4}$  Piepenbrink et al., 2001

Novus International, Inc. | 17988 Edison Ave. | Chesterfield, MO 63005 USA | 1-800-568-0088 | novusint.com

Products not available in all countries.

NOTICE: While the information contained herein ("Information") is presented in good faith and believed to be correct as of the date hereof, Novus International, Inc., does not guarantee satisfactory results from reliance upon such information, disclaims all liability for any loss or damage arising out of any use of this information or the products to which said information refers and MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE WITH RESPECT TO THE INFORMATION OR PRODUCTS, except as set forth in NOVUS's standard conditions of sale. Nothing contained herein is to be construed as a recommendation to use any product or process in conflict with any patent, and Novus International, Inc. makes no representation or warranty, express or implied, that the use thereof will not infringe any patent.

