

OCTOBER 2020

New Adisseo Ruminant Team in EMEA Advocates for Better Amino Acid Nutrition and Well-Balanced Rations

Adisseo has more than four decades of experience with dairy amino acid nutrition. In the 1990s, Adisseo introduced Smartamine® M rumen protected methionine. MetaSmart® followed in 2003 for use in pelleted and liquid feeds. And RumenSmart™ was introduced recently to increase milk fat.

At the end of 2019, Adisseo and Kemin ended their 13-year agreement whereby Kemin distributed Adisseo Smartamine® and MetaSmart® Dry & Liquid, as well as the vitamin product Microvit® A Supra ruminant, within Europe, the Middle East, and Africa (EMEA).

Adisseo since then has continued to bolster the awareness of amino acid nutrition and its benefits for dairy cows. When rations are properly balanced for amino acids, supplemental methionine is commonly used. Cows benefit when their need for methionine, an essential nutrient is met.

With production, milk yields, milk protein and milk fat contents increase. With health, a reduction of metabolic-related health issues is realized, such as reduced ketosis post calving. Likewise, reproductive metrics improve. In addition, the protein content of well formulated rations decrease. This reduces nitrogen excretion and allows dairy farmers to extract full value from the rations they feed.

In addition to marketing the above-mentioned products, Adisseo has built an enhanced and dedicated ruminant team in the EMEA market.

"We hand-picked 26 talented recruits with the right backgrounds to bring insightful solutions



Dr. Christophe PaulusRuminant Sales Director, EMEA
Adisseo

to our customers. Each has the knowledge, tools, and resources to help customers develop their business. They come from Spain, France, Italy, Germany, the Benelux, the British Isles, Nordic countries, CIS, Central Europe, South Africa, the Maghreb, Turkey



and the Middle East," Dr. Christophe Paulus, Ruminant Sales Director – EMEA, Adisseo said. "With the addition of this team, Adisseo now handles the worldwide sales of its extensive ruminant product portfolio directly."

Dr. Paulus added: "Adisseo has an unrivaled depth and breadth of knowledge and skill in amino acid nutrition. Our ruminant experts are knowledgeable in all aspects of the ruminant business: Nutrition, feeds, and farm management. Each helps develop customer businesses from the design of rations and feeds to the training and support of individuals."



Robert Bennett Ruminant Category Manager, EMEA Adisseo

Amino Acid Nutrition

Robert Bennett, Ruminant Category Manager, EMEA, also explained that adoption of dairy amino acid nutrition continues to grow rapidly. "Nearly five million dairy cows worldwide receive rations balanced for amino acids usingAdisseo Smartamine® or MetaSmart® methionine products," he said.

"Well-balanced amino acid nutrition begins with optimising the rumen function with adequate supplies of carbohydrate, effective fiber, and rumen degradable protein. This makes amino acid-rich microbial protein available to the small intestine for absorption. Then, include an effective rumen-protected methionine along with high-lysine feedstuffs to ensure an adequate methionine-to-lysine ratio in the diet," he said, recommending that when selecting a rumen-protected amino acid product, one needs to be sure to assess the efficacy of each using the plasma free-aminoacid dose-response method from the University of New Hampshire - the industry gold standard."

"Adisseo now leads the industry in its ability to develop rations with balanced metabolisable amino acid (mAA) levels," Dr. Paulus said, but according to him there is still much work to be done to establish amino acid balancing in dairy cows as widely in Europe as in the US.

Mike Shearing, Global Ruminant AA Formulation Manager, added: "The Adisseo Ruminant Technical Team is uniquely qualified to help nutritionists and their producers capture the benefits of the Adisseo SmartLine™ of products. The team has a thorough understanding of the underlying science of amino acid nutrition and practical experience with the many formulation systems. We work with each customer individually to develop recommendations to meet their specific needs and help them achieve greater animal performance and profitability, improved animal health and reproduction, reduced ration costs, and reduced environmental impact."





Mike ShearingGlobal Ruminant AA Formulation Manager
Adisseo

Research Focus

When asked how Adisseo was able to cultivate this focus on amino acid balancing, Bennett highlighted the strong historical ties with the research community.

"Adisseo is a science-based company and has worked closely with the very top experts in dairy amino acid nutrition," he said, mentioning notably Dr. Henri Rulquin, INRA, France, and Dr. Charles Schwab, professor emeritus, University of New Hampshire.

And on the Adisseo R&D side, Dr. Brian Sloan (Global Ruminant Director) leads a comprehensive team with a range of highly qualified individuals, from worldwide R&D experts Drs. Daniel Luchini and Lahlou Bahloul, to field staff in countries worldwide. "Their joint

efforts led to the first ruminant amino acid supply and requirement systems, in the INRA PDI system and the U.S. NRC system. Additional research demonstrated the benefits of amino acid balancing beyond performance and into the fields of health, reproduction, and environment. A new research focus is investigating cow longevity and dairy farming sustainability," Bennett said.

Ration Formulation

"Advances in scientific research and new technologies have enhanced our ability to accurately predict animal requirements and nutrient supplies," Shearing said. "Today's sophisticated ration formulation models take into account many variables. They not only estimate the supplies of linear nutrients such as crude protein or starch, but also non-linear nutrients including metabolisable energy, metabolisable protein, and metabolisable amino acids. Both CNCPS and the INRA Feeding System for Ruminants when used properly allow our technical staff to help customers accurately evaluate feed rations and develop sound, costeffective solutions to improve performance and profitability."

"Combining a better understanding of feedstuffs with robust formulation models allows nutritionists to develop feed rations that allow for greater animal performance with improved nitrogen efficiency and reduced costs. This improves producer profitability and reduces environmental impact," Shearing said. "Recent improvements in feed chemistry and analysis allow dairy nutritionists to quickly and inexpensively test for many more nutrients. Doing so provides more detail on the amounts and types of fiber, proteins, fatty acids, and amino acids. Near-infrared (NIR) Spectroscopy provides the ability to determine the supply of the major nutrients in commonly used feeds in real time at a low cost. Soon we anticipate the



ability to use this technology to measure the amino acid content of individual feed samples, even for unique farm-raised forages."

Shearing went on to say: "And being actively present in many countries, we draw upon a broad and diverse knowledge of feedstuffs and forages, as well as on very current competencies in the ration formulation systems used by nutritionists such as CNCPS (Cornell Net Carbohydrate and Protein System), INRA PDI, and others, to bring the best support possible to our customers."



Dr. Laurent ThiaucourtDairy Nutrition Consultant
France

Finally, Dr. Laurent Thiaucourt, a France-based dairy nutrition consultant, who is helping with

the training of the Adisseo EMEA team and assisting with the direct support of certain partners, wished to stress that the science behind today's dairy ration formulation systems continues to expand.

"Initially, recommendations specific to the supply of digestible methionine and lysine were incorporated by INRA and then the CNCPS model. Some of the other European systems, such as Feed into Milk, DVE-OEB, or nXP, now calculate ruminant amino acid supplies in their own units," he said. "Many of the various systems in use today are evolving to incorporate new knowledge of ruminant biology so more precise nutritional recommendations can be provided."

"Bottom line, this makes it possible to come closer to matching the intakes and needs of dairy ruminants. It also confirms the reality of the almost systematic deficiency in methionine of dairy cow rations," Dr. Thiaucourt added.

Published in association with Adisseo