

Feed Supplements vs Feed Additives

In the UK, the terms "feed supplements" and "feed additives" pertain to different components incorporated into livestock diets, each with distinct purposes and regulatory frameworks.

Feed Additives

Feed additives are substances intentionally included in animal feed to achieve specific effects, such as enhancing feed quality, supporting animal health, or improving performance. They encompass a variety of categories, including:

- **Technological Additives:** Preservatives and antioxidants that maintain feed quality.
- **Sensory Additives:** Flavourings that improve feed palatability.
- **Nutritional Additives:** Vitamins and minerals that supplement the nutritional content of the feed.
- **Zootechnical Additives:** Digestibility enhancers and substances that promote growth or yield.
- **Coccidiostats and Histomonostats:** Additives used to control parasitic infections.

In the UK, the use of feed additives is strictly regulated to ensure safety for animals, humans, and the environment. Key legislation includes:

- **Regulation (EC) No 1831/2003:** Governs the authorisation, marketing, and use of feed additives.
- **Regulation (EC) No 1831/2005:** Establishes requirements for feed hygiene.
- **Regulation (EC) No 767/2009:** Addresses the placing on the market and use of feed.

The Food Standards Agency (FSA) oversees the authorisation of feed additives in Great Britain, ensuring that only approved additives are utilized in animal nutrition.

Feed Supplements

Feed supplements are products added to the basic diet to provide additional nutrients that may be lacking, thereby ensuring a balanced and complete nutritional intake. They often include:

- **Protein Supplements:** Such as soybean meal.
- **Energy Supplements:** Like cereal grains or molasses.
- **Mineral and Vitamin Supplements:** Including calcium, phosphorus, and vitamin A.

While feed supplements are primarily intended to enhance the nutritional value of the diet, they are subject to regulations concerning feed hygiene and safety. The same legislative frameworks that apply to general feed materials also govern feed supplements, ensuring they are safe and suitable for animal consumption.



Assurance Requirements

In addition to legislative controls, industry assurance schemes play a crucial role in maintaining feed safety and quality. For instance, the Feed Materials Assurance Scheme (FEMAS) covers all feed ingredients intended for direct feeding to animals or for inclusion in compound feeds and blends. FEMAS is based on Hazard Analysis and Critical Control Points (HACCP) principles, aligning with UK and EU feed legislation.

Participation in such assurance schemes helps feed business operators demonstrate compliance with legal requirements and industry best practices, thereby ensuring the safety and quality of feed supplements and additives used in livestock nutrition.

In summary, while both feed supplements and feed additives are integral to livestock nutrition, they serve different functions and are subject to specific legislative and assurance requirements in the UK to ensure their safe and effective use.

Bovaer® - a methane reducing feed additive. An example of a feed additive is Bovaer®, scientifically known as 3-nitrooxypropanol (3-NOP), which is designed to reduce methane emissions from ruminant livestock, particularly dairy cows. By inhibiting an enzyme involved in methane production during digestion, Bovaer® can decrease enteric methane emissions by approximately 30% in dairy cows (DSM-Firmenich, 2024)

Regulatory Approval in the UK

In December 2023, the UK's Food Standards Agency (FSA) and Food Standards Scotland granted market authorization for Bovaer®, marking the first UK approval of a feed additive aimed at environmental benefits. This authorization allows dairy farmers in England, Scotland, and Wales to incorporate Bovaer® into cattle feed to mitigate methane emissions.



Industry Adoption and Assurance

Following regulatory approval, several UK retailers and dairy producers initiated trials to assess Bovaer's® effectiveness and integration into farming practices. In November 2024, Arla Foods, in collaboration with retailers such as Morrisons, Tesco, and Aldi, launched a project involving around 30 farms to trial Bovaer®. This initiative aims to understand the practicalities of using the additive and its impact on farm operations.

Public Response and Safety Considerations

The introduction of Bovaer® has elicited mixed reactions. While many support its potential environmental benefits, some consumers have expressed concerns about its safety, leading to calls for product boycotts. However, regulatory bodies, including the FSA, have evaluated Bovaer's® safety, concluding that it does not adversely affect animal health or milk quality.

Relation to Feed Additives and Supplements

As previously discussed, feed additives are substances added to animal feed to achieve specific effects, such as improving feed quality or animal performance. Bovaer® falls into this category, specifically as a zootechnical additive aimed at environmental enhancement by reducing greenhouse gas emissions. Its use is subject to stringent regulatory controls to ensure safety and efficacy.

In summary, Bovaer® exemplifies a feed additive designed to address environmental concerns within livestock production. Its development and implementation in the UK highlight the role of regulatory frameworks and industry collaboration in integrating innovative solutions into agricultural practices.