

### Summary

Farm and companion animals need appropriate methods to administer authorised veterinary medicines to restore or safeguard their health and welfare. The provision of prescribed medicines, via medicated feed, allows for the treatment of farm animals and, in the future, companion animals in a stress-free and safe manner. This document outlines why we sometimes need to treat animals via medicated feed, the main types of in-feed medicines available and the regulatory controls that are in place safeguarding our food derived from animals.

### Introduction

Medicated feed is one method that can be used to administer authorised veterinary medicines to animals. It complements other forms of administration such as injection, in-water, tablet or drench. It is an effective way to treat animals in a controlled, safe and welfare friendly manner. The production, supply and use of medicines, including those for in-feed treatment is highly regulated at all stages by UK and EU legislation.

### Farm Animal Health and Welfare

In the production of a sustainable supply of nutritious and safe food, farmed animals and fish are often reared in groups i.e. in herds, or flocks.

An important aspect of herd and flock health is the development of health plans with veterinary surgeons. These plans focus on preventative health measures, including good biosecurity, hygiene and nutrition to reduce the incidence of disease. The use of vaccines, where available, is also an important tool to reduce disease on farm.

Preventing or reducing the incidence of disease in the first instance is a welfare-friendly and sustainable approach to farm animal medicine – by reducing pain and suffering in animals and reducing the costs involved in treating disease outbreaks.

However, despite all these measures, animals – just like people, can and do succumb to disease. Importantly, safeguarding the health and welfare of animals reared in groups means taking into consideration the fact that when an animal becomes ill, other in-contact animals are at risk of acquiring that infection also. Practically, this means that groups of animals, which may be sub-clinically infected (infected but not yet showing clinical signs of being ill), may also require treatment based on veterinary advice. This mode of treatment, called metaphylaxis, ensures that in addition to those animals that are clinically ill, those that are sub-clinically infected and those with a high likelihood of becoming infected are also treated so their welfare does not suffer.

Handling larger groups of animals to administer a medicine, for example by injection, to each individual is stressful for the animals concerned, impractical and can pose animal and farmer safety risks. The provision of prescribed veterinary medicines in-feed is often an appropriate route to treat those groups of animals. This is particularly relevant to the UK, where pig welfare has been a priority and, for example, outdoor pig production now accounts for 40% of total pig production (1). It is also essential for administering medicines to farmed fish, which is an important industry here in the UK.

### Companion Animal Health and Welfare

Our companion animals also have the potential, in certain circumstances, of benefitting from receiving their medication via feed. Examples include long-term treatments for chronic conditions in animals that can become stressed or are unmanageable for owners using alternative routes of administration e.g. giving tablets to cats. Current proposals to update the EU legislation that governs medicated feed aim to expand and encourage the development and innovation of medicated feed products for our companion animals (2).

The animal health sector welcomes these proposals and supports the need to increase the range and

availability of in-feed veterinary medicinal products for our pets.

## In-feed Veterinary Medicines

The main types of medications that are currently available for in-feed treatment reflect the prevalent infection and disease threats on farms. These are primarily antibiotics and antiparasitics, but also include pain-relieving medication. There is potential to expand this list in the companion animal sector in the future to address specific companion animal health problems.

### Antibiotics

Commonly occurring bacterial diseases in farm animals include respiratory and gastrointestinal (gut) infections. When these infectious bacterial diseases occur on farm, within a group of animals, in-contact animals may also be at risk. The treatment of bacterial disease, via antibiotics in a medicated feed can only occur with a veterinary prescription. This is because all antibiotics are classified as 'POM-V or Prescription Only Medicines – Veterinary Surgeon' meaning they can only be supplied on prescription by the vet.

The animal health sector supports the use of antibiotics in a responsible manner. This means antibiotics should be used 'as little as possible, but as much as necessary'. The routine, on-going or continuous, treatment of animals with antibiotics in-feed is not supported. Furthermore, antibiotics must not be used to compensate for poor hygiene or for inadequate husbandry conditions or where improvements in animal husbandry could reduce the need for antibiotic treatment. These important medicines should be used according to the approved recommendations issued when they were licensed by the veterinary regulator and in accordance with responsible use principles (3) (further information is available in the NOAH 'Responsible Use' briefing document). **Antibiotics are not used in animals for growth promotion purposes.** This practice was banned in the EU in 2006.

### Anti-Parasitics

Parasitic diseases, in farm animals and our pets, are very common and should be effectively controlled to avoid poor health and welfare.

In poultry flocks and pig herds, the control of internal parasites (endo-parasites) and external parasites (ecto-parasites) can be managed practically through the provision of an anti-parasitic medicated feed. Anti-parasitics are generally classified as POM-VPS medicines, meaning they can only be supplied on prescription by a veterinary surgeon, pharmacist or suitably qualified person. The Responsible Use of Medicines in Agriculture Alliance (RUMA) have produced advice on the responsible use of anti-parasitic medicines in farmed species (4) and further

information is also available in the NOAH anti-parasitics briefing documents.

## Regulatory Controls

There are a comprehensive range of regulatory control measures in place that govern the authorisation, manufacture, distribution, marketing, sale and use of veterinary medicine products and medicated feed. These include UK veterinary medicine regulations and a framework of EU legislation (5, 6). All veterinary medicines, including those used to make medicated feed have been approved according to strict quality, efficacy and safety criteria.

Veterinary medicines, which have been approved for use in-feed, are only supplied on prescription to licensed and approved feed business operators for incorporation into feed. In the UK, feed business operators are subject to licensing and inspection and they must comply fully with the full provision of Veterinary Medicines Regulation (7).

These controls provide a framework whereby medicated feeds are prepared in a quality controlled and safe manner according to international standards with full traceability.

Another important safeguard of special importance for food producing animals is adherence to withdrawal periods: the time during which treated animals, including those treated with medicated feed, cannot be slaughtered for food, nor can their products (e.g. meat, milk and eggs) enter the food chain (8). Extensive surveillance testing for veterinary medicines residues by highly sensitive methods and enforcement of the required withdrawal period by regulatory authorities ensures the safety of food from such animals, with results being published (9).

## Conclusions

- The provision of veterinary medicinal products via medicated feed is a stress-free and safe way to safeguard farm, and in the future, companion animal health and welfare.
- The main types of veterinary medicinal products in medicated feed represent the key disease threats and include antibiotics and anti-parasitics.
- Animals raised in groups require special consideration to prevent and treat disease in those animals in-contact to protect their health and welfare.
- There are a comprehensive range of regulatory controls imposed on the manufacture, supply and use of medicated feed and on the surveillance of residues in food from animals.

**What is NOAH?** The National Office of Animal Health Ltd represents the UK animal medicine industry: its aim is to promote the benefits of safe, effective, quality medicines for the health and welfare of all animals. For further information, including more briefing documents on animal medicines topics see [www.noah.co.uk](http://www.noah.co.uk) and follow @UKNOAH on Twitter. For more information on RUMA, including responsible use guidelines, visit [www.ruma.org.uk](http://www.ruma.org.uk).

*(For more information see NOAH briefing documents on Antibiotics for Animal Health and Welfare, Antibiotic Resistance, Responsible Use of Antibiotics, Controls on Veterinary Medicines and Farm Animal Parasite Control).*

## References:

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<http://pork.ahdb.org.uk/pig-production/outdoor/>
2. European Commission proposal for Medicated Feed Regulations:  
[http://ec.europa.eu/food/food/animalnutrition/labelling/medicated\\_feed\\_en.htm](http://ec.europa.eu/food/food/animalnutrition/labelling/medicated_feed_en.htm)
3. Responsible Use of Medicines Alliance (RUMA):  
[www.ruma.org.uk](http://www.ruma.org.uk)
4. RUMA advice on the responsible use of anti-parasitic medicines in farmed species  
[www.ruma.org.uk/antiparasitics/](http://www.ruma.org.uk/antiparasitics/)
5. UK 2013 Veterinary Medicine Regulations, schedule 5: Medicated feedingstuffs and specified feed additives  
[www.legislation.gov.uk/uksi/2013/2033/pdfs/uksi\\_20132033\\_en.pdf](http://www.legislation.gov.uk/uksi/2013/2033/pdfs/uksi_20132033_en.pdf)
6. Legal framework governing medicinal products for veterinary use in the EU:  
[http://ec.europa.eu/health/veterinary-use/legal-framework/index\\_en.htm](http://ec.europa.eu/health/veterinary-use/legal-framework/index_en.htm)
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[www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/424676/VMGNote17.PDF](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/424676/VMGNote17.PDF)
8. NOAH publishes a comprehensive listing of manufacturers' recommended and approved withdrawal periods in the Compendium of Data Sheets for Animal Medicines:  
[www.noahcompendium.co.uk](http://www.noahcompendium.co.uk).
9. VMD guidance on residue surveillance:  
[www.gov.uk/guidance/residues-surveillance](http://www.gov.uk/guidance/residues-surveillance)