



Why should I use FlightPath?

Salmonella

FlightPath has been shown to competitively exclude salmonella from the intestinal microflora.

Escherichia coli (*E. coli*)

FlightPath has been shown to competitively exclude *E. coli* from the intestinal microflora.

Breeding

Giving FlightPath to the parent birds ensures the squab receives the normal avian gut flora as early as possible.

Stress

Sending birds for racing, pairing, diet changes and moulting all cause stress that can result in an imbalance in the gut microflora. FlightPath rebalances the gut microflora.

Medication

Treatments such as antibiotics can destroy the normal gut microflora and leave birds open to disease. FlightPath re-establishes the whole live natural avian gut microflora.

Frequently asked questions

Vaccines

I have vaccinated my birds – can I use FlightPath?

Paramyxovirus:

There are no negative interactions between paramyxovirus vaccine and Flightpath so it is safe to use both at the same time.

Paratyphoid (*Salmonella*) vaccines:

There are no negative interactions between injectable (killed) *Salmonella* vaccines and FlightPath. It is safe to use both at the same time.

Oral (live) *Salmonella* vaccines should be given before FlightPath is used; otherwise FlightPath can exclude the vaccine strain, preventing the vaccine from generating immunity in the bird.

Probiotics

Can I use FlightPath and probiotics?

FlightPath establishes a balanced and complete microflora – something that probiotics cannot achieve. Probiotics will bias the gut flora in favour of the particular strains of bacteria present in the product and so disrupt the FlightPath bacterial balance. We do not recommend use of probiotics for birds that have been given FlightPath.

FlightPath – Natural Avian Gut Microflora

The natural avian gut flora contains millions of bacteria composed of numerous different species. These bacteria are the normal microflora and are vital for the wellbeing of the bird.

The normal microflora helps to prevent pathogenic (harmful) bacteria from establishing themselves within the gut flora by several methods:

Direct attack – produce bacteriocins and organic acids that can damage the pathogenic bacteria.

Nutrient competition – can out-compete pathogenic bacteria for the nutrients available in the gut.

Receptor competition – can prevent pathogenic bacteria attaching to the wall of the gut.

The microflora also helps with:

Nutrient release – releases nutrients from complex foods and make them available for absorption.

Vitamins – makes vitamins (e.g. vitamin A), which can be absorbed by the gut.

What is FlightPath?

FlightPath is not a probiotic or a vaccine; it is a **competitive exclusion product** specifically produced to contain **the normal avian bacterial microflora** from healthy birds. It has been tested rigorously to ensure it contains no pathogenic viruses, bacteria or mycoplasmas (see attached list for more information)

The microflora is cultivated in fermenters then freeze-dried to form a stable free-flowing powder. FlightPath is used extensively in the gamebird industry to maintain bird health.

Over 2,000,000,000 doses of our product have been sold worldwide for various species of birds.

How do I use FlightPath?

FlightPath can be given directly to pigeons from weaning onwards. It is also safe to give to parent birds whilst they are feeding their young – as well as maintaining the health of the adult birds, this will establish a safe natural microflora in the young birds.

FlightPath can be used to establish the normal gut microflora in the bird and to re-establish the microflora following periods of stress (moulting, racing, pairing etc) medication or diet change.

We recommend use of FlightPath once a month but it can be used more frequently if necessary.

Each sachet of FlightPath is sufficient for 50 birds. Dissolve the contents of the sachet by sprinkling into 500ml or 1 pint of non-chlorinated water (tap water left to stand overnight or boiled, cooled water). Leave for 10 minutes then stir gently to mix in the FlightPath. Add the prepared product to an empty drinker. With multiple lofts divide amongst drinkers to ensure all birds have access to the product. Then add sufficient non-chlorinated water to the drinker(s) to give a volume of suspension that the birds will drink over a period of not more than 6 hours.

Once all the FlightPath has been consumed, rinse and refill the drinkers with fresh tap water.

Testing carried out on FlightPath

Master Seed testing

FlightPath is manufactured from a master seed by fermentation. The master seed has been tested by the UK veterinary authorities to ensure absence of the following pathogens:

Viruses

- Avian adenoviruses
- Avian encephalomyelitis virus
- Avian infectious bronchitis virus
- Avian infectious bursal disease
- Avian influenza type A virus
- Avian lymphoid leucosis (A&B)
- Avian nephritis virus
- Avian reovirus
- Avian reticuloendotheliosis
- Chicken anaemia agent
- Egg-drop syndrome 76 virus
- Fowl Pox virus
- Infectious laryngotracheitis virus
- Marek's disease virus
- Newcastle disease virus
- Rhinotracheitis virus

Bacteria

- Campylobacter spp.
- Chlamydia spp.
- Clostridium botulinum

- Clostridium colinum
- Clostridium difficile
- Clostridium perfringens A and C (toxigenic types)
- Escherichia coli serovars O1:K1, O2:K1 and O78:K80
- Escherichia coli O157
- Erysipelothrix rhusiopathiae
- Haemophilus spp.
- Listeria spp.
- Mycobacterium spp.
- Mycoplasma gallisepticum
- Mycoplasma synoviae
- Ornithobacterium rhinotracheale
- Pasteurella spp.
- Salmonella spp.
- Shigella spp.
- Staphylococcus aureus
- Vibrio cholerae
- Yersinia spp.

Batch testing

Every batch of FlightPath is tested before it is released for sale. FlightPath is tested to ensure absence of the following bacteria:

- Campylobacter spp.
- Clostridium botulinum
- Clostridium colinum
- Clostridium difficile
- Clostridium perfringens A and C (toxigenic types)
- Escherichia coli serovars O1:K1, O2:K1 and O78:K80
- Escherichia coli O157
- Erysipelothrix rhusiopathiae
- Haemophilus spp.
- Listeria spp.
- Pasteurella spp.
- Salmonella spp.
- Shigella spp.
- Staphylococcus aureus
- Vibrio cholerae
- Yersinia spp.

Every batch of FlightPath also has to pass an efficacy test against a challenge with Salmonella before it is released.

FlightPath is a registered trade mark.

FlightPath is made by:
Microbial Developments Ltd
Spring Lane North
Malvern Link
Worcestershire
WR14 1BU
01684 580832/891055
Email: info@micdev.com
www.microbialdevelopments.com

FlightPath is manufactured according to ISO 9001:2000
Note: - Insert ISO 9001:2000 logos and MDL logo as for previous leaflet

FPF50EN.10.05