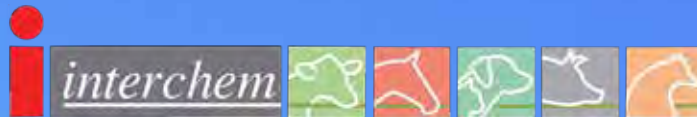


Veterinary Exclusive



Nature working with Nature

Want to be part of the future of animal health?



Probiotic and Postbiotics*

A unique range of liquid pro and postbiotic solutions across species*, exclusively available through the veterinary channel.

* Precision Microbes for equine is classed as a complementary feed.

MICROBES MOVEMENT

HOW IT ALL BEGAN

How are we all here? It's a big question to answer but there are some clues in how plants, animals and humans have survived and developed through the millennia. They have done this by utilising their natural defences and adapting to challenges like disease.

Precision Microbes, a Dublin based company, have years of experience working with microbes and decades of research developing their unique products in the marketplace, with customers in fine turf and horticulture around the world.

Precision Microbes is bringing their unique science around microbes with an exciting range of animal products developed in their state-of-the-art production facility in Dublin. They have identified key microbes (good bacteria) that can work together to have many positive health benefits. We want to bring that knowledge and training now into the Irish veterinary

market. Interchem is delighted to bring these solutions that will help achieve better health and performance across species. These unique solutions also provide natural solutions to some of the great challenges like the reduction of antibiotics.

These solutions are liquid live probiotics and all important postbiotics. This is also just the beginning of an exciting range of biological solutions that will be brought to the Irish market.



WHAT'S THE DIFFERENCE?

PREBIOTICS, PROBIOTICS, AND POSTBIOTICS

Precision Microbes contain both live beneficial bacteria in high numbers along with their postbiotic (metabolites) in a unique liquid solution.

PREBIOTICS

These are feed for the bacteria like fibre. These prebiotics are fuel for the beneficial bacteria in the gut



PROBIOTICS

These probiotics such as live beneficial bacteria found in precision microbes products, act like factories to ferment fibre and prebiotics to make metabolites



POSTBIOTICS

These are the metabolites produced by the bacteria outside the body. These are the goods that support and benefit digestive function and immunity.



IMMUNE AND GUT SUPPORT

Postbiotics are the beneficial metabolites delivered to the animals gut. These can be digestive enzymes, short chain fatty acids, bacterocins and other metabolites. These interact at cell level to improve digestive function, immunomodulation and help with competitive inhibition.



MICROBES SIMPLIFIED

THE GUT MICROBIOME

The gut microbiome is vast array of micro-organisms based in the gut. It contains bacteria, fungi, yeast, protozoa and other microbes. It is an exciting area of science in humans and animal health. This complex microbiota is like an other organ working in harmony with the digestive tract to do a number of key functions:

- Improve digestive health
- Regulate immunity and immune modulation and
- Competitive inhibition and acting to inhibit or exclude pathogens.

The bacteria and beneficial microbes play a key role in cell function and the production of enzymes that aid digestion. They do this by producing a vast array of metabolites (postbiotics).

These postbiotics are SCFAs, enterocins, bacterocins, enzymes and other metabolites. It is these compounds that regulate cell function and the production of the protective mucous layer by goblet cells¹.

70% of immunity is gut based² with billions of lymphocytes making up the G.A.L.T or gut associated

lymphoid tissue. These cells are in the lumen, dense areas like peyers patches and in mesenteric lymph nodes.

With a healthy microbiome you can have good immune modulation and regulation of immunity. With an unstable microbiome you can get inflammation and immune dysregulation. These impacts on immunity can be acute but in many of our animals can also be chronic. With our gut microbiome linked to our lungs, skin, brain and other organ function. We need to do everything



we can to achieve homeostasis here.

Finally we must remember the microbiome is effected by many factors like, nutrition, stress, the environment or other toxins. We are always trying to promote both diversity and stability in the microbiome. It is a complex interaction between pathogens and essential commensals in the gut.

Competitive inhibition is the ability of bacteria to compete with and inhibit with each other. Having a healthy stable population and by the use of probiotics like enterococcus NCIMB10415³ as well as our other probiotic strains we can help achieve this.

Acute disruptions can lead to dysbiosis and digestive upsets in the gut microbiome. By using our unique probiotics and postbiotics we can see quick return to normal digestive health and function. The key thing that makes Precision Microbes different is there is live probiotics and postbiotics used in the liquid medium. This is why the speed of recovery in particular dysbiosis and digestive upsets has been seen.

WHY WE ARE DIFFERENT

- Precision Microbes have unique liquid blends of live probiotic bacteria in their log phase in a ph controlled dormant state with all their metabolites (postbiotics). This means a rapid speed of action.⁴
- There are a **large numbers of CFUs per ml of live beneficial bacteria that are ready to act immediately** (1.5×10^8 CFU/ml).
- **Rapid speed of onset in gut stabilisation** in supportive care of dysbiosis or with animals with diarrhoea. This is achieved by producing and culturing the bacteria in their log phase with all their metabolites or postbiotics⁴.
- There are probiotics or beneficial bacteria like **Enterococcus Faecum NCIMB 10415*** in the pet and calf products which is licensed as effective gut stabiliser under veterinary supervision.
- The products are **only available through the veterinary channel**.
- They are **developed and manufactured in the Precision Microbes Irish facility**.
- Precision Microbes is fully **licensed with the DAFM** and also the range is **fully organic certified**.
- The equine Precision Microbes product is **certified not to contain banned substances by the** Laboratoire des Courses Hippiques.
- **Feedback from vets is extremely positive** with great results across species in the use of the products for gut stabilisation but also with long term use.



Probiotic and Postbiotic for calves

to support live weight gain



On farm challenges

With calf diarrhoea accounting for over 60% of disease in the pre-weaned calf we have a product that will help recovery and gut stabilisation following scour

With the need to reduce antibiotics and the challenge of AMR we are delighted to be bringing these unique solutions to the veterinary market.

Our calf probiotics containing *E faecium* NCIMB 10415² is licensed for gut stabilisation under veterinary supervision. Our calf probiotics are only available through the veterinary channel.

Uses and benefits

When administered early as part of a supportive care in calf diarrhoea it is extremely effective at gut stabilisation.

It can also be used to help support gut health and better immunity in calves under stress or for groups of calves recovering from disease.

Long term use of probiotics in young calves will also support better gut health, digestive function and competitive inhibition. So from birth until weaning the probiotics can be added to milk to help support better calf performance.

Dosage

	Treating	Dose rate	Duration
Calves	Gut stabilisation	60mls orally twice daily	3 days or until symptoms resolve
	Recovering from scour or other diseases Stress periods During periods of transition	50 mls daily	5-7 days
	Older calves or supportive treatment to summer scour syndrome	100mls daily	3 days
	Long term usage	<ul style="list-style-type: none"> • 30mls daily from birth • Then 30mls every 2nd day 	<ul style="list-style-type: none"> • For the first 10 days • Up until weaning



For more information contact your local Interchem Territory Manager

Precision Microbes Pet Products

Probiotic & Postbiotic Complimentary Dietetic Feed
for Cats and Dogs



Pet challenges

Dysbiosis and diarrhoea can be a common clinical condition presented to vets in both cats and dogs.

With these cases, return to normal function and gut stabilisation is really important.

With the need to reduce antibiotics and the challenge of AMR we are delighted to be bringing these unique solutions to the veterinary market. Our probiotics and postbiotics can also be used to support better gut health during and after periods of antibiotic therapy.

With good digestive health and immunity being linked to a healthy microbiome. We are really excited to hear back from vets around how the long term use in their patients with digestive issues is improving.

Uses and benefits

When administered early as part of a supportive care in diarrhoea it is extremely effective at gut stabilisation. Our pet probiotics containing *E faecium* NCIMB 10415³ is licensed for gut stabilisation under veterinary supervision. All our pet probiotics are only available through the veterinary channel.

It can also be used to help support gut health and better immunity in pets during periods of stress or post recovery from other digestive upsets.

Long term use of probiotics in pets will also support better gut health, digestive function, immunity and competitive inhibition. Precision Microbes is already seeing the significant benefits of long-term use in pets that are prone to digestive upsets.

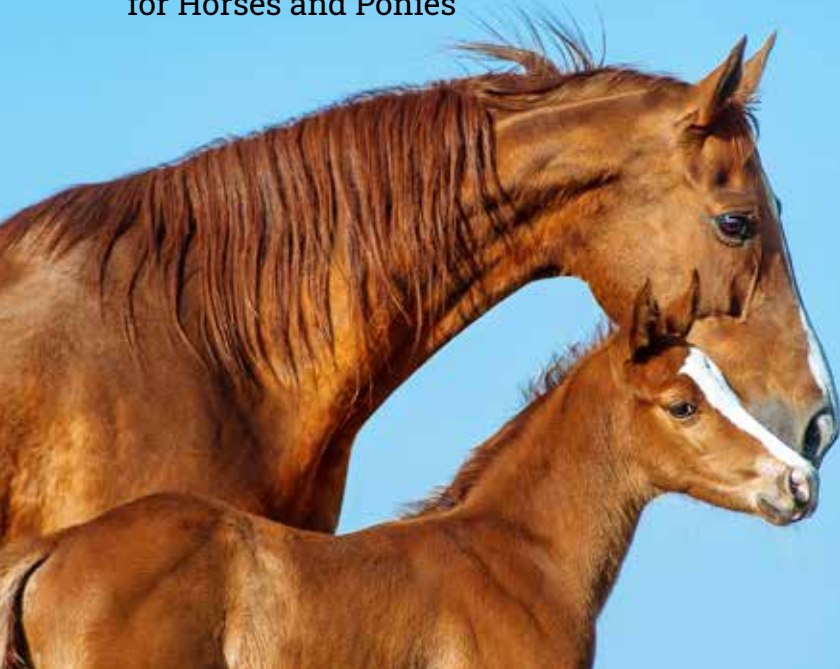
Dosage

	Treating	Dose rate	Duration
Pets	Rapid gut stabilisation	1ml/kg/BW twice daily	3 days*
	Recovering from digestive disturbances	1ml/kg/BW in feed or water	Daily for up to 28 days
	Long term use	1ml/kg/BW in feed daily	
	Pets on antibiotics	1ml/kg/BW daily	Ensure at least 2 hours between antibiotic administration and probiotics
*The first dose can be given orally then followed up in feed.			



Probiotic and Postbiotic for Equine

Probiotic & Postbiotic Complimentary Dietetic Feed
for Horses and Ponies



Equine Challenges

Precision Microbes is delighted to introduce our horse complimentary feed into the Irish market.

With the digestive health of horses being so important we are really excited to bring this unique liquid complementary feed into the Irish market.

Our complimentary feed contains live beneficial bacteria in a liquid medium.

It is a solution of lactic acid bacteria produced by the fermentation of organic herbs.

It also certified organic and also has certification from the Laboratoire des Courses Hippiques which confirms it has no substances that can be viewed as performance enhancing.

Uses and benefits

This complementary feed is only available through the veterinary channel.

It is designed to help aid better digestive health on long term usage.

It is a complimentary feed that can also be used to aid in-conjunction with supportive therapy for foals and adult horses recovering from dietary upsets.

Dosage

	Treating	Dose rate	Duration
Horses	Young foals	50mls daily	Up to 28 days
	Young or adult horses	Between (50-150ml) daily	Up to 28 days
	Long term use for adult horses	100mls daily	



For more information contact your local Interchem Territory Manager

TESTIMONIALS



Tom Flanagan MVB

Tom is a large animal vet and partner in Park Veterinary Centre a 6-vet practice in Co. Longford.

"I started using the calf probiotics this spring. What I was seeing and hearing back from farmers was the speed of action. Particularly with calves recovering from scour. They were showing a rapid return to normal faecal consistency and health.

Also with groups of calves under pressure, recovering from scours or other disease, we are finding the products give these calves a huge lift.

We knew we had a good product when farmers started to come back for the products themselves.

This was because of the results they were seeing. The feedback from farmers has been overwhelmingly positive. We also have now started seeing the benefits in more long-term use with farmers on calves being bought in and reared.

With the need to reduce antibiotics and improve health on our clients farms we are excited on how these products will help us achieve our goals."



Máiréad Berkery MVB

Máiréad Berkery is a companion animal vet and partner in Avondale Vet Clinic a 10-vet practice based in Co Wicklow and a member of XL Vets Ireland.

"With lots of dogs presenting with sick tummies it is great to have such an effective solution now available to us. Two of the veterinary nurses were the first to use the products on their own dogs with diarrhoea.

Both of them commented on the speed of recovery to normal bowel movements.

This is something we also began to see with patients in consults and in the surgery. What has also been exciting is some of our patients with ongoing digestive problems that have gone on the probiotics long term. They are really showing huge improvements. The owners of both cats and dogs have been extremely happy with the improvements in digestive health and overall health on long term use.

We also now offer people whose pets or on antibiotics for long term infections the probiotics to help with gut health.

It is nice as we learn more about the science of the microbiome to have an Irish product delivering such results in our practice for our clients."



Padraig O'Reilly MVB

Padraig O'Reilly is an equine vet and partner in 5 vet practice Mullingar Equine Vets based in Co. Westmeath.

"I began using the Precision Microbes this spring. You are always looking for products to support and help aid recovery from digestive upsets. I found the products brilliant in foals recovering from diarrhoea and helping with returning normal gut health.

We began using the products with our clients and now find a lot of them keep coming back for the product. All the vets in the practice are now using this routinely especially in young foals and horses that have had digestive problems.

With the success of the product in supportive care we began seeing customers putting horses on the product daily to support better gut health and digestion. The feedback already with this application has been brilliant.

These products have now become part of our daily care programmes.

Or follow up care in horses with digestive issues. The long term usage is also something that clients are getting results with and I see this growing by itself."

Scan QR code below to Elizabeth O'Brien, a farmers opinion, on long term usage of Precision Microbes.



SCAN ME

Scan the QR code to watch a video on Olivia O'Gorman whose two dogs have been using Precision Microbes long term.



SCAN ME

Scan the QR code to watch more about Precision Microbes.



SCAN ME



MICROBES ACADEMY

Interchem is building a large resource of videos and training for vets and vet practice teams across species. These videos will talk about the science and the application of the products.

Interchem has developed interactive in person training with lunch and learns and short seminars for all veterinary staff.

With so much science behind each of the products, the team at Interchem aim to educate veterinary teams with the need to know knowledge on the gut microbiome.



Sign up today:
[Email marketing@interchem.ie](mailto:marketing@interchem.ie)



“In 19 years of veterinary practice this is the most interesting science and products I have got to work with. These products are game changing for both vets and the animals in their care. The results have to be seen to be believed”

TOMMY HEFFERNAN

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Any other data related to the content in this brochure is available upon request.

Distributed by:

Interchem (Ireland) Ltd
29 Cookstown Industrial Estate
Dublin 24

Tel: 01 451 8959 Fax: 01 451 2540

W: www.interchem.ie E: info@interchem.ie

