

Easy Reference Sheet

Use of Protexin® in Hand-raised Marsupial Joeys

Version 2 (December 2020)

Introduction

Protexin® is a multi-strain probiotic containing live beneficial bacteria developed specifically for animals which aids in improving intestinal microbial balance.

Protexin® has been used successfully over many years by our experienced wildlife carers for species such as koalas, possums, gliders and macropods. It has aided in maintaining a balanced digestive system, particularly during times where a joey is subjected to additional stress and/or is experiencing gut flora imbalances.

It is well recognised that stress can have a significant impact on an animal's health. We believe that adding Protexin® to their diet can help to minimise disruption to the normal intestinal balance. Wildlife carers believe that it has also contributed towards improving the overall health of compromised individuals.



The 2 Protexin® products most commonly used by Australian wildlife carers include:

- **Protexin® Powder** (green label) – containing 60 million colony forming units (CFU)/g; and
- **Protexin® Soluble** (orange label) – containing 180 million colony forming units (CFU)/g.

Whilst the Protexin® Soluble is more expensive, it is much better value in the long run as it is a much more concentrated product. A 250g tub of Protexin® Soluble retails for ~\$65.00 and 500g tub for ~\$90.00. The Protexin® Soluble is easily dissolved in milk formula when providing to milk-fed joeys.

Dose Rate

The following dosage guideline has been adapted from the Protexin® datasheet (as attached) for wildlife species.

Protexin® Soluble (Orange label product)

Species	Individual Dose - Per animal per day	
	Maintenance Dose	Stress Dose
Small orphaned joeys (pouch young) <i>(Antechinus, bandicoots, gliders, and other small mammal species)</i>	0.5g per animal per day equivalent to 1/8 teaspoon per animal per day.	1g per animal per day equivalent to ¼ teaspoon per animal per day.
Orphaned joeys (pouch young and pouch emergence) <i>(Macropods, possums, gliders, koalas)</i>	1g per animal per day equivalent to ¼ teaspoon per animal per day.	2g per animal per day equivalent to ½ teaspoon per animal per day.
Sub-adult and adult mammals <i>(Adult possums, sub-adult/adult koalas, pre-release macropods)</i>	1g – 2g per animal per day equivalent to ¼ to ½ teaspoon per animal per day.	2g – 4g per animal per day equivalent to ½ to 1 teaspoon per animal per day.

It is important to note that the recommended dose rate is based on a measure **PER ANIMAL PER DAY**. The dose is not based on the quantity of milk consumed. Larger animals (e.g. adult possums, pre-release macropod joeys, sub-adult/adult koalas) can be given a higher dose, which would be comparable to the manufacturer's recommendation for small to larger dogs (as per attached datasheet).

Less-experienced carers should consult with their Species Coordinators. There will be some individual animals where it may be more appropriate to use an alternative to Protexin®, for example 'poo shakes' or 'pap feeding', as this is often a much more effective way of re-establishing gut flora in many species of marsupials.

Calculating a Daily Dose

To correctly administer according to the manufacturer's guidelines:

- **For milk-fed joeys:** Prepare the daily quota of milk and add the Protexin® dose as outlined above. Dividing the milk between the feeds over a 24-hour period will ensure that the dose is administered over the entire day. For example – if a joey is taking 20mls milk per day, add ¼ teaspoon of Protexin®. As the joey grows, increase the milk amount but do not increase the amount of Protexin® (unless you are administering the Stress dose).
- **For weaned animals:** Add the Protexin® dose to the supplementary food ensuring that the full amount will be consumed by the animal.

Do not add Protexin® whilst an animal is on antibiotics.

Maintenance Dose vs Stress Dose

For most wildlife in care, using the **Maintenance Dose** of Protexin® Soluble will be the most appropriate option, bearing in mind that the Protexin® Soluble (orange) already contains 3 times the amount of good bacteria as the Protexin® Powder (green).

Examples of when the Maintenance Dose would be appropriate would include:

- The animal is healthy with no underlying health issues;
- The animal has an established, healthy gut flora (i.e. they have a balance of good bacteria and no adverse bacterial or candida infection); and
- The animal is settled in care (i.e. they are not displaying any excessive signs of stress, are eating well, have normal faecal and urine output).

The **Stress Dose** should be used when an animal has been, or is about to be, subjected to additional stress, either physically or psychologically. When wildlife in care are subjected to stress, this can reduce their immunity and cause digestive upsets.

Examples of when the Stress Dose would be appropriate may include:

- The first ~5 days when an animal comes into care - provide the Stress Dose until the animal is feeding well and adjusted to being in care. The length of time may need to be adjusted pending upon the individual animal's circumstances;
- At the completion of a course of antibiotics to help re-establish healthy gut flora. The length of time this will be dependent upon the antibiotics prescribed and the overall condition of the animal;
- When the animal is going to be transferred to another carer – commence the Stress Dose 2-3 days prior to transfer and continue until the animal is settled into care at its new surroundings.
- When the animal is in poor health/condition (e.g. dermatitis, malnutrition, diarrhoea). Continue until the animal has recovered and is in good condition (within in normal weight range, good fur quality, eating well).

If you are unsure about which dose to use or how to calculate the dose required, please contact your relevant Species Coordinator.

Storage and Measuring

Protexin® should be stored in an airtight container in the refrigerator. The manufacturer states that if kept refrigerated, the product can be used for 12 months past the expiry/best before date.

We suggest purchasing a set of measuring spoons which start at 1/8 teaspoon to accurately calculate the dose required. These can be purchased at variety stores, kitchen outlets and eBay.





PROTEXIN®

PROTEXIN® IS A MULTI-STRAIN PROBIOTIC CONTAINING LIVE BENEFICIAL BACTERIA.

PRESENTATION: There are different types of PROTEXIN®:

PROTEXIN® POWDER - In feed formula containing 60 million colony forming units (CFU)/g (ACO – Certified Allowed Input)

PROTEXIN® SOLUBLE - Water soluble formula containing 180 million CFU/g (ACO – Certified Allowed Input)

PROTEXIN® PASTE - Oral paste formula containing 180 million CFU/g

PROTEXIN® LIQUID - Oil based formula containing 180 million CFU/mL

ACTIVE CONSTITUENTS: Each g or mL contains: *Lactobacillus acidophilus*, *Lactobacillus delbrueckii* subspecies *bulgaricus*, *Lactobacillus plantarum*, *Lactobacillus rhamnosus*; *Bifidobacterium bifidum*; *Enterococcus faecium*; *Streptococcus salivarius* subspecies *thermophilus*.

PROPERTIES: PROTEXIN® is a blend of live viable microbes which benefits the host animal by improving the intestinal microbial balance. Everyday use of PROTEXIN® helps maintain a balanced digestive system, thus optimising digestion of feed and enhancing your animals' health, naturally. These microbes are safe, non-toxic and residue free.

PROTEXIN® may be used during periods of stress (stresses disrupt the normal intestinal balance), e.g. overcrowding, pregnancy and lactation, scouring and diarrhoea, temperature extremes, transportation, training and exercise, and medication; and following animal husbandry procedures or practices such as antibiotic use, birth, castration, debeaking/dehorning, diet changes, loss of appetite, surgery, vaccination, weaning and worming. PROTEXIN® is compatible with feed ingredients including anthelmintics, coccidiostats, minerals and vitamins, and some antibiotics.

Indications for use (Australia):

- An aid during periods of intestinal dysfunction in all animals, including treatment and control of scouring or diarrhoea, exclusion and suppression of pathogens such as *E. coli*, *Salmonella* spp. and *Aeromonas* spp.
- Post-antibiotic therapy in all animals for the re-establishment of gut microflora following antibiotic usage.
- Improved weight gains and feed conversion in growing pigs and cattle.
- Productivity improvements and reduced mortality in poultry.
- Aids in the establishment of gastrointestinal microflora of physiologically immature animals, e.g. day old chicks, neonatal calves, pigs, foals, lambs and kids, puppies and kittens.

Indications for use (New Zealand):

- An aid during periods of intestinal dysfunction in all animals.
- Post-antibiotic therapy in all animals for the re-establishment of gut microflora following antibiotic use.
- Improved weight gains and feed conversion in growing pigs and cattle.
- Productivity improvements and reduced mortality in poultry.
- Aids in the establishment of gastrointestinal microflora of physiologically immature animals, e.g. day old chicks, neonatal calves, pigs, foals, lambs and kids, puppies and kittens.

DOSAGE AND ADMINISTRATION:

(Australia)

RESTRAINT: PROTEXIN® should not be used in conjunction with Penicillins, Cephalosporins, Tetracyclines, Avoparcin, Gentomycin, Lincomycin, Streptomycin, Tiamulin or Tylosin, but may be used immediately following these antibiotics.

(New Zealand)

RESTRAINT: Using concurrently with some antibiotics may compromise beneficial effects. PROTEXIN® efficacy may be reduced if used in conjunction with some antibiotics. Please contact International Animal Health Products for advice regarding the use of PROTEXIN® in conjunction with antibiotics.

(Australia & New Zealand)

Individual Dose: Use at stress levels for the first 5 days then at the maintenance dose level.

In-Feed: Refer to label for instructions.

PRODUCT ►	P. POWDER			P. SOLUBLE**		P. PASTE	P. LIQUID	
SPECIES	INDIVIDUAL DOSE (per head per day)		IN FEED*	INDIVIDUAL DOSE (per head per day)		INDIVIDUAL DOSE (per head per day)	INDIVIDUAL DOSE (per head per day)	
	Maintenance	Stress	(kg/tonne)	Maintenance	Stress	Stress	Maintenance	Stress
HORSES:	10 g	20 g	1.0	10 g	20 g	10-20 g	10 mL	20 mL
FOALS/PONIES:	5 g	10 g	2.0	5 g	10 g	5-10 g	5 mL	10 mL
CATTLE:	2 g	4 g	0.5-1.0	2 g	4 g	2-4 g	2 mL	4 mL
CALVES:	1 g	2 g	0.4	1 g	2 g	1-2 g	1 mL	2 mL
SHEEP/GOATS:	2 g	4 g	1.2	2 g	4 g	2-4 g	2 mL	4 mL
LAMBS/KIDS:	1 g	2 g	1.4	1 g	2 g	1-2 g	1 mL	2 mL
PIGS:	1-2 g	2-4 g	0.5-0.6	2 g	4 g	2-4 g	2 mL	4 mL
PIGLETS:	1 g	2 g	1.4	1 g	2 g	1-2 g	1 mL	2 mL
DOGS:	1-3 g	2-6 g*	1.5	1-3 g	2-6 g*	1-3 g to 2-6 g	1-3 mL	2-6 mL*
PUPS/KITTENS:	1 g	2 g	1.0-3.0	1 g	2 g	1-2 g	1 mL	2 mL
CATS:	1 g	2 g	1.5	1 g	2 g	1-3 g to 2-6 g	1 mL	2 mL
POULTRY:								
CHICKS				1 g/L**				
BROILERS/LAYERS			0.5-1.5	500 g/500 L**				
CAGED BIRDS:				1 g/L**			1 mL/500 g feed	

*Use as a guide only. Rates may vary depending on daily feed intakes. ♦ (Small-2 g, Medium-4 g, Large-6 g). **Add P. Soluble to drinking water – make fresh daily.

For other animals contact International Animal Health Products. **NOTE:** A level measure holds around 2 g (small), 25 g (large) (P. POWDER, P. SOLUBLE) & the finger pump delivers 1.5 mL (P. LIQUID).

WITHHOLDING PERIODS: MEAT: NIL; MILK: NIL; EGGS: NIL

TRADE ADVICE: EXPORT SLAUGHTER INTERVAL (ESI): ESI not required (Australia)

POISONS SCHEDULE: EXEMPT (Australia)

REGULATORY STATUS:

Australia:

New Zealand:

AUSTRALIAN PESTICIDES & VETERINARY MEDICINES AUTHORITY

EXEMPT

PACK SIZES: PROTEXIN® POWDER: 125 g, 250 g, 1 kg, 5 kg, 20 kg, 25 kg
PROTEXIN® PASTE: 30 g, 100 g (syringe)

PROTEXIN® SOLUBLE: 125 g, 250 g, 500 g, 2.5 kg, 25 kg
PROTEXIN® LIQUID: 125 mL, 250 mL, 1 L, 5 L, 25 L

Australia-Wide Toll Free: 1800 801 201

Email: info@iahp.com.au

New Zealand Toll Free: 0800 424 999 (0800 IAH 999)

Website: www.iahp.com.au

© The Australia/World symbol is a registered trademark of International Animal Health Products P/L.

© PROTEXIN is a registered trade mark of Probiotics International Ltd used under licence by International Animal Health Products P/L.

Product produced under licence from Probiotics International Ltd.

© Copyright 1995-2019 International Animal Health Products P/L. All Rights Reserved.

04/2019