

# LAMB REARING **GUIDEBOOK**

+ OTHER YOUNG ANIMALS

2020 Edition



# Milligans Feeds Ltd

## Lamb Rearing guide and other young animals

A proud 100% New Zealand owned and operated company based in Oamaru, South Island, Milligans Feeds is one of New Zealand's leading suppliers of animal nutrition products.

Having over 30 years experience in producing high quality, top performing calf and lamb milk replacers, Milligans Feeds has been the choice for generations.

With our many years of producing milk replacers, it has allowed us to constantly improve our products by way of quality ingredients and manufacturing techniques which prove themselves on farm.

Milligans Multi Milk Replacer is designed for lambs but is also suitable for feeding to goat kids, foals, fawns, piglets, cria (infant alpaca) pups and kittens.

This booklet is based around rearing lambs but some of the principles can be adopted for the other species listed and we encourage the user to use common sense.

We strive to provide New Zealand farmers with the best products for their young stock and endeavour to give full support by way of knowledge and advice. This booklet was developed to provide you, the 'rearer', with the tools and advice on rearing a better animal for profit if it's your business or if it's simply a farm pet.

### Milligans Milk Replacer Quality and Performance

Every Milligans Feeds product is batch tested for functional and nutritional properties to a strict level. All additives used in our products are at the manufacturer's recommended therapeutic rates for the best performance possible.

Neither Milligans nor any other person involved in the preparation of this Calf Rearing Guide accepts any liability for any opinion or information (including the accuracy or completeness thereof) or for any consequences flowing from its use. The information contained in this document is given in good faith, has been derived from sources perceived to be reliable and accurate.

The logo for Milligans Feeds features the word "MILLIGANS" in a large, bold, red serif font. The letter "M" is significantly larger and more stylized than the other letters. Below "MILLIGANS", the word "FEEDS" is written in a smaller, bold, red sans-serif font.

# Lamb Health

**Lamb survival is such a critical part of farming for profit because they are so susceptible to death from exposure or infection due to their small size especially if they are from a multiple birth.**

If you have received a lamb that is a few days or a week old then usually all you need to do is keep feeding it and keep it warm. If you have orphans or have been given a new born within a day or two old then special care is needed to keep it alive.

Once you get your lamb home, you can now start to care for it and there are a few things to look out for:

1. Has it had colostrum?
2. Is it drinking ok and has plenty of energy?
3. Is it cold and needs warming up?
4. Is the navel looking infected? Treat with iodine based spray to be sure if it is within a couple of days old. Trim any long umbilical cords to about 50mm from the body.
5. Even if it's a few days old it still needs to be kept warm and fed regularly because lambs can go downhill very quickly if close attention is not paid.

## Feeding

Colostrum is the first milk from the ewe that is high in protein, fat and vitamins and minerals that provide energy for the lamb to grow and it provides antibodies that protect the lamb against disease and infection since it has no immune system yet.

Immunoglobulins cannot pass through the placenta so it is vital that the lamb receives colostrum within the first 18 hours but the earlier the better. Antibody transfer slows rapidly between 24 and 36 hours so those first few hours are critical.

Feed lambs by bottle or multi lamb feeder depending on your numbers. Cut only a small amount off the end of the teat, because too much flow can drown the lamb. As the lamb grows, cut a bit more off the teat allowing more flow.

## Weaning

Lambs need to be weaned gradually, preferably over a period of a week. Reduce the daily feeds until you are down to one or two 500ml feeds per day.

If they have been eating pellets since 21 days old then weaning will be fine from about days 40-50 but if no dry food has been fed then they must be consuming pellets for at least 10 days and drinking water freely. An approximate weaning weight is 15kg.

# Hygiene

Like all infants, hygiene is critical when it comes to rearing healthy animals so make sure to clean equipment with disinfectant between each feeding session.

## Biggest threats to survival: Hypothermia and starvation!

### Hypothermia

If a lamb is not drinking enough milk to make energy for warmth then it will start to lose body temperature and will be vulnerable to hypothermia. Small lambs are more susceptible than larger lambs especially during bad weather e.g. snowy or rainy days with cold wind.

Tube feed the lamb/s colostrum if necessary to elevate body temperature and consider moving lamb/s to a warmer part of farm or a barn to assist this.

Hypothermia usually occurs in lambs over 24 hours old from exposure and is a result of starvation. Older lambs suffering from hypothermia should be treated exactly the same except they will not require any colostrum and a standard LMR (lamb milk replacer) should be fed.

### Warming lambs

A lamb's normal body temp is 38.8°C – 39.4°C and when this drops below 37.7°C, it is considered hypothermic. Use a rectal thermometer to check temperatures accurately.

- Wet lambs should be dried and wrapped in a towel or wool blanket.
- If needed use a hair dryer to help in warming.
- You can use a heat lamp but do so sparingly as lambs can overheat
- Put lambs in a warm shed or garage until you see they are moving well.

### Starvation

Starvation is considered the biggest killer of lambs and usually occurs within the first few days of life.

It is very visible to see as lambs tend to be either standing with heads down and ears drooping or sitting down and not moving as it's too weak to get up.

The importance of colostrum within the first 6 hours is critical so vigilance with checking on paddocks is vital in saving new born lambs.

## ..... Starvation continued

Things that can contribute to starvation are:

- Insufficient colostrum
- Sore mouth
- Fatigue from difficult birth
- Rejection from mother
- Teats - blocked, too big
- Poor milk production

Treat as above and tube feed and keep warm. If you have intervened in time it may have a better chance to survive so getting it warm is a big priority.

## Common problems

**There are a few common problems lambs have that you need to look out for and know how to treat:**

1. Scours - this can be very common in lambs and is usually nutritional, meaning it is caused by over feeding or the mixture can be a bit too rich for it even though it's made to the feeding recommendations. Seek advice if this happens or reduce the volume per feed for a couple of days until the lamb gets used to it.
2. Bloat - one of the most common causes of death for young lambs, usually from 3 weeks of age onward. See page the for causes and treatment.
3. High temperature - usually a sign of infection. If scouring, treat with electrolytes as per treatment below. If rehydration does not work, contact your vet immediately as antibiotics may be required.

Treatment: Follow a rehydration therapy of electrolytes and milk. Feed electrolytes at one feed and milk at the next, separated by at least 2 hours - DO NOT feed electrolytes and milk together!

4. Sudden or quick death - mostly linked to poisoning by noxious plants.

# Management

## Things you can do:

1. Check lambs are nursing – does lamb have a full stomach?
2. Strip teats to check milk supply of ewe.
3. Tether lamb/s to rejecting ewe to feed
4. Mother up orphans to another ewe if rejected by own mother

If bottle feeding is required then colostrum from one's own healthy flock is recommended but a cows' liquid or powdered colostrum like ExcelPlus Colostrum is a good substitute.

Lambs are susceptible to bloating or scouring from overfeeding so stick to the feeding rates but use common sense and adjust the volume down if these issues are occurring.

## Lamb bloat

Bloat can be caused by another factor other than overfeeding and it is from bacteria called *Sarcina ventriculi*, and is found in or on the ground. When ingested, it causes fermentation of the lactose (sugar) in the warm milk and bloats the lamb quite quickly and can be fatal if you don't know what to look for. If this occurs there are a couple of options;

1. Make up and feed the milk cold
  - or**
2. Add 2 teaspoons of yoghurt to the milk in order to increase the good bug population in the gut to reduce the risk of bloating.

See our website [www.milligansfeeds.co.nz](http://www.milligansfeeds.co.nz) for article on lamb bloat.

- If reducing singles or triplets, remove the smaller of the two twins and keep the best matched pair of triplets together.
- If removed from the ewe, leave lambs in a warm environment for 6-8 hours before feeding colostrum or milk. If they are very weak, feed colostrum right away and then leave and monitor regularly without interfering too much.
- Keep warm and dry. Feed small amounts every 2-3 hours until the appetite increases. Follow the feeding guidelines as recommended.

# Milligans Multi Milk Replacer

**Suitable for lambs, kids, fawns, foals, cria, piglets, pups and kittens and other infant animals.**

Milligans Multi Milk Replacer is a high quality blend of dairy proteins and is fortified with a vitamin and mineral premix to support the functions of the growing infant animal.

Multi Milk Replacer can be used from day 1 but it is recommended to feed a colostrum supplement such as ExcelPlus Colostrum for the first 1-2 days of life to provide the much needed immunity the baby animal requires for growth and development.

**Available in 2kg, 5kg, 10kg and 20kg Bags**



## TYPICAL ANALYSIS

26%	PROTEIN
26%	FAT
38%	LACTOSE
6%	MINERALS
3%	MOISTURE

# GOLamb WHEY Milk Replacer

GOLamb WHEY Milk Replacer is a whey-based milk replacer developed by Milligans Feeds specifically for rearing lambs in New Zealand conditions.

## Key Features:

- Suitable for 2-3-day old lambs
- Can be fed directly after colostrum
- It contains the ExcelPlus protection package, a blend of selected specialty ingredients to support the intestinal health and immune system such as pre-biotics, selected yeast and a boosted vitamin and mineral premix to maximize lamb health.
- Utilises Co-spray technique which allows the product to have better stability and gives little to no sedimentation.
- Includes proven well digestible wheat proteins NOT commonly used protein sources such as soy and therefore offers a safer option for young lambs.
- Satisfies the demands of young lambs for a healthy and secure rearing period

Available in 20kg and 10kg bags.



## TYPICAL ANALYSIS

22%	FAT
22%	PROTEIN
40%	LACTOSE
6%	ASH
4%	MINERALS
3%	MOISTURE



# GOgoat WHEY Milk Replacer

GOgoat WHEY Milk Replacer is a whey-based milk replacer developed by Milligans Feeds specifically for rearing goat kids in New Zealand conditions.

## Key Features:

- Suitable for 2-3-day old goats
- Can be fed directly after colostrum
- It contains the ExcelPlus protection package, a blend of selected specialty ingredients to support the intestinal health and immune system such as pre-biotics, selected yeast and a boosted vitamin and mineral premix to maximize goat health.
- Utilises Co-spray technique which allows the product to have better stability and gives little to no sedimentation.
- Includes proven well digestible wheat proteins NOT commonly used protein sources such as soy and therefore offers a safer option for young goats.
- Satisfies the demands of young lambs for a healthy and secure rearing period



## TYPICAL ANALYSIS

22%	FAT
22%	PROTEIN
40%	LACTOSE
6%	ASH
4%	MINERALS
3%	MOISTURE

# GOMulti Milk Replacer

## GOMulti for multi species - lambs, goats and calves.

This milk replacer formulated and manufactured by Milligans Feeds is a blend of quality whey and casein-based powders intended to feed a range of different animals..

Whey powders are becoming popular to rear young animals on such as calves, lambs, and goats, due to its nutritional benefits of reducing digestion upsets. However, some research shows that animals can struggle to get to weight quickly on whey alone and do not thrive as they would on a traditional whole or skim milk diet such as our own premium Milligans Multi-Milk Replacer.

GOMulti takes this concept and combines both whey and casein products to give a 'best of both worlds' performance outcome for Kiwi farmers.

GOMulti Milk Replacer is a blend of New Zealand sourced premium quality casein-based powder, dairy whey powder, along with highly digestible vegetable oils, lactose and a vitamin and mineral premix to maximize animal health.

This product can also be fortified with colostrum or whole milk when available to extend its feeding time.



### TYPICAL ANALYSIS

22%	FAT
22%	PROTEIN
45%	LACTOSE
6.8%	MINERALS
3%	MOISTURE

# GRUNTA Milk Supplement

## Supplement milk powder for pigs.

**GRUNTA Pig Feed Powder is a high protein milk powder supplement made from blended dairy powders. It can be added to feed for an extra boost in growth.**

Grunta is designed to be added to current feeding systems in DRY form rather than as an actual liquid milk feed due to its lower solubility.

Pour or sprinkle the powder over other feed such as food waste or compound feeds. It can be fed dry, dampened down or be mixed into a slurry.

GRUNTA is designed to be fed as supplement only. It is not a complete infant animal liquid milk replacer and Milligans recommends piglets are reared with Milligans Multi-Milk Replacer due to it being specially formulated to rear a number of infant animals including piglets.

If feeding GRUNTA to pigs less than five weeks of age as a protein supplement, feed in conjunction with pig starter meal or molasses.

### FEEDING INSTRUCTIONS:

#### Weaner Pigs:

Sprinkle 150gms (approximately 1.25 standard cups) over feed either dry or as a slurry.

#### Mature Pigs:

Sprinkle 250gms (approximately 2 standard cups) over feed either dry or as a slurry.



### TYPICAL ANALYSIS

28% PROTEIN

10% FAT

50% LACTOSE

8% ASH

# ExcelPlus™ Colostrum

## High IgG colostrum powder

ExcelPlus Colostrum is a premium quality colostrum powder specially formulated with high IgG (immunoglobulin) levels and is nutrient rich with added vitamins and minerals to help support early growth and development of new-born animals.

Colostrum is known as the “white gold” of first nutrition for newly born animals and it is most effective within the first 24hrs of birth for the transfer of immune boosting antibodies. After this period, the absorption rate is near zero and the function of colostrum then only becomes useful for localised gut and intestinal health or energy source.

ExcelPlus Colostrum is a premium quality source of colostrum for a range of animals and can be used either as the sole colostrum source, or in combination with fresh colostrum. It can also be fortified with fresh colostrum.

Suitable for Calves, Lambs, Goat kids, Foals, Alpaca Cria, Piglets

**Product Available in 600g foil sachets or made to order in 15kg size**



### TYPICAL ANALYSIS

15%	IMMUNOGLOBULIN
52%	PROTEIN
25%	LACTOSE
8%	FAT
6%	MINERALS
3%	MOISTURE

# ExcelPlus™ Electrolyte

## Electrolyte rehydration powder

ExcelPlus Electrolyte is a therapeutic re-hydration powder, designed to enhance water absorption and aid recovery from dehydration due to diarrhoea by replacing the lost mineral salts.

Formulated from high quality ingredients, ExcelPlus Electrolyte is designed to give your animals that much needed boost when required.

Dehydration from diarrhoea is one of the most common causes of death in young animals so use ExcelPlus Electrolyte as soon as signs appear.

### ExcelPlus Electrolyte contains the essential ingredients:

- Dextrose & Lactose – for an instant energy boost which encourages drinking and feeding.
- Bicarbonate – pH buffer and gut modifier for enhanced recovery.
- Sodium, Chloride and Potassium – vital electrolytes in optimal amounts.
- Vitamin A – an important vitamin to enhance natural immunity and health.

### ExcelPlus Electrolyte benefits:

Fast acting energy source, safe and non toxic, nil milk withholding (even for bobby calves), mixes easily in water

ExcelPlus Electrolyte is suitable for calves, horses, lambs, kids and cria (infant alpaca)



### Directions for use:

Simply add 80g of ExcelPlus Electrolyte to 1 litre of water. Shake or stir vigorously and top up to 2 litres for 1 standard dilution. Feed electrolytes warm between 20 - 30°C.

Please see the rehydration table for calf requirements and dose rates on page 14. See product label for all other animals.

# Milligans Accessories

## Milligans Feed Bottles.

Milligans Feed Bottles are manufactured from high density, durable recycled polyethylene.

The rounded design of the bottle enables ease of cleaning.

Feeding measures on the side of the bottle ensures that the lamb receives the correct amount from day one to weaning.

Each bottle comes with its own high-quality lamb teat.

**Milligans Feed Bottles are available per unit or per carton (20 Milligans Feed Bottles) from all leading merchant stores.**



# Feeding Guidelines

The following are guidelines only - please use your common sense.

If you are unsure whether the product is suitable for your intended use, which feed system to use, or the quantities to use, please get advice from your animal feed retailer, animal nutritionist or direct from Milligans on 0800 STOCKFEED (0800 786 253). Or visit [www.milligansfeeds.co.nz](http://www.milligansfeeds.co.nz) for more information.

All feeding rates are based on average weights for newborn animals. Use the feeding guidelines and rates for which specific animal you are feeding and use common sense when it comes to size or ill thrift of the animal as when to feed more or less depending on what is required.

## Other information

The feeding rates in this guidebook are based of Milligans Multi-Milk Replacer feeding/mixing rates. GOLamb Whey Milk Replacer for example has different feeding rates as it is a different product. For these rates you can refer to the feeding rates on the bag itself or check out our website [www.milligansfeeds.co.nz](http://www.milligansfeeds.co.nz) for the latest/more detailed feeding information, guidelines, tips, and news.

Please ensure product is stored away from direct sunlight in a cool, clean, dry, and vermin-free environment. Close bag after opening and use within 12 months of purchasing.



## Lambs

**Feed colostrum at birth as with all young animals and leave on the ewe if possible for the first 24 hours.**

Feed ewe colostrum if available or use ExcelPlus Colostrum as a suitable alternative.

Make available fresh, clean water at all times and you can introduce Premium Sheep pellets from 3 weeks onward.

Mix 200gm (measured or weighed) MMR into 500mls of hot, (not boiling) water and mix thoroughly. Add the remaining water to make 1 litre. Feed at a temperature of 38-40°C.

### Lamb

#### Mixing Rate - 200g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (L)
day 1	6	ExcelPlus Colostrum as per guidelines		
2-4	6	150ml	30g	0.9L
5-7	4	250ml	50g	1.0L
8-21	4	350ml	70g	1.4L
22 to weaning	3	350ml	70g	1.1L





## Foals

**Feed colostrum at birth as with all young animals and leave on the mare if possible for the first 24 hours. Feed mare colostrum if available or use ExcelPlus Colostrum as a suitable alternative.**

Make available fresh, clean water at all times from day 1 and you can introduce a high energy, high protein pellet in the first week.

Foal sizes vary greatly so follow the feeding guidelines fully and NEVER increase the concentration but only the volume of feed depending on the size of the foal.

At 21 weeks you can start to gradually wean the foal over 3 weeks, making sure the foal is strong and healthy and consuming good amounts of pellets and soft hay.

These feeding rates are a guide only so contact your vet or horse expert for further advice.

Mix 100g (measured or weighed) MMR into 500mls of hot, (not boiling) water and mix thoroughly. Add the remaining water to make 1 litre. Feed at a temperature of 38-40°C.

### Foal - Large Breed

#### Mixing Rate 100g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (L)
up to 2 weeks	12	900ml	90g	10.8L
2 - 6 weeks	10	1200ml	120g	12L
6 - 12 weeks	8	1300ml	130g	10.4L
12 - 21 weeks	6	1500ml	150g	9L

### Foal - Small Breed

#### Mixing Rate 100g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (L)
up to 2 weeks	12	700ml	70g	8.4L
2 - 6 weeks	10	1000ml	100g	10L
6 - 12 weeks	8	1100ml	110g	8.8L
12 - 21 weeks	6	1200ml	120g	7.2L

## Goat Kids

Feed colostrum at birth as with all young animals and leave on the nanny if possible for the first 24 hours. Feed nanny colostrum if available or use ExcelPlus Colostrum as a suitable alternative.

Make available fresh, clean water at all times and you can introduce meal from 2 weeks onward.

Mix 200g (measured or weighed) MMR into 500mls of hot, (not boiling) water and mix thoroughly. Add the remaining water to make 1 litre. Feed at a temperature of 38-40°C.

### Kid

#### Mixing Rate 160g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (L)
day 1	6	ExcelPlus Colostrum as per guidelines		
2-4	6	150ml	24g	0.9L
5-7	4	250ml	40g	1.0L
8-21	3	450ml	72g	1.4L
22 to weaning	2	500ml	80g	1.0L



## Piglets

Feed colostrum at birth as with all young animals and leave on the sow if possible for the first 24 hours. Feed sow colostrum if available or either cow colostrum or ExcelPlus Colostrum powder as a suitable alternative.

Mix 150g (measured or weighed) MMR into 500mls of hot, (not boiling) water and mix thoroughly. Add the remaining water to make 1 litre. Feed at a temperature of 38-40°C.

### Piglet

#### Mixing Rate 150g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (mL)
day 1	8	ExcelPlus Colostrum as per guidelines		
2-4	8	25ml	4g	200ml
5-7	6	40ml	6g	200ml
8-21	4	80ml	12g	200ml
22 to weaning	4	100ml	15g	200ml

\*Piglets should be encouraged to drink from an auto feeder or dish as soon as possible.

\*A creep feed can be introduced from 2 weeks of age onward.



## Fawns

Feed colostrum at birth as with all young animals and leave on the Hind if possible for the first 24 hours. Feed Hind colostrum if available or either cow, goat or ExcelPlus Colostrum as a suitable alternative.

Do not increase the concentration or volumes above the recommended levels but use common sense and cut back slightly if the animal is struggling with the volume.

Always follow the manufacturer's feeding recommendations unless otherwise instructed by a vet or animal nutritionist.

Mix 200g (measured or weighed) MMR into 500mls of hot, (not boiling) water and mix thoroughly. Add the remaining water to make 1 litre. Feed at a temperature of 38-40°C.

### Fawn

#### Mixing Rate 200g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (L)
day 1	6	ExcelPlus Colostrum as per guidelines		
2-4	6	150ml	30g	0.9L
5-7	5	200ml	40g	1.0L
8-21	4	350ml	70g	1.4L
22 to weaning	3	600ml	120g	1.8L

\*Fallow deer fawns only require ½ the feeding rate of red deer.



# Pups & Kittens

Feed colostrum at birth as with all young animals, especially with the first 12 hours and preferably from the bitch. If this is not possible then ExcelPlus Colostrum powder is a suitable alternative.

Mix 200g of Multi Milk Replacer to 500ml of pre-boiled water and stir thoroughly while topping up to 1 litre. Feed at a temperature of 38°C.

It is important not to increase concentrations or volumes above recommended rates unless advised by the manufacturer or your veterinarian.

## Kittens

### Mixing Rate 200g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily Volume (mL)
day 1 - 3	10	ExcelPlus Colostrum as per guidelines		
4 - 7 days	10	2ml	0.4g	20mL
1 - 2 weeks	10	4ml	0.8g	40mL
2 - 4 weeks	6	8ml	1.6g	48mL
4 - 8 weeks	4	15ml	3.0g	60mL
8 - 12 weeks	3	35mL	7.0g	105mL

## Puppy - Small Breed

### Mixing Rate 200g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (L)
day 1 - 3	10	ExcelPlus Colostrum as per guidelines		
4 - 7 days	10	3ml	0.6g	30mL
1 - 2 weeks	10	5ml	1.0g	50mL
2 - 4 weeks	6	10ml	2.0g	60mL
4 - 8 weeks	4	20ml	4.0g	80mL
8 - 12 weeks	3	105mL	9.0g	135mL

## Puppy - Medium Breed

### Mixing Rate 200g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (L)
day 1 - 3	10	ExcelPlus Colostrum as per guidelines		
4 - 7 days	10	5ml	1.0g	50mL
1 - 2 weeks	10	7ml	1.4g	70mL
2 - 4 weeks	6	15ml	3.0g	90mL
4 - 8 weeks	4	25ml	5.0g	100mL
8 - 12 weeks	3	50mL	10.0g	150mL

## Puppy - Large Breed

### Mixing Rate 200g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (L)
day 1 - 3	10	ExcelPlus Colostrum as per guidelines		
4 - 7 days	10	8ml	1.6g	80mL
1 - 2 weeks	10	15ml	3.0g	150mL
2 - 4 weeks	6	35ml	7.0g	210mL
4 - 8 weeks	4	50ml	10.0g	200mL
8 - 12 weeks	3	80mL	16.0g	240mL

Pups and kittens should be fed by bottle until their eyes open, after which they can then lap milk from a dish. Fresh, clean and preferably cooled, pre-boiled water must be available at all times.

Check with a vet or breeder for further advice on caring for your specific breed of pet.

### Adult dogs:

Nursing bitches and working dogs can benefit from a supplementation of Multi Milk Replacer at a rate of 80-100g mixed into dry feed. This provides extra energy and important vitamins and minerals to the diet.

# Cria

## (Infant alpaca)

Feed colostrum at birth as with all young animals and leave on the Dam if possible for the first 24 hours. If bottle feeding, it is critical to feed colostrum within the first 6 hours as for calves and lambs and for the following 2 days. Feed alpaca colostrum if available otherwise colostrum from deer, goats or cows may be used. ExcelPlus Colostrum powder is a suitable alternative.

Feeding information for Cria is limited in New Zealand and the below feeding recommendations are a guideline only. For expert advice we suggest contacting a local alpaca farmer otherwise follow the guidelines and adjust your system based on a 'trial and error' programme.

Mix 200g (measured or weighed) MMR into 500mls of hot, (not boiling) water and mix thoroughly. Add the remaining water to make 1 litre. Feed at a temperature of 38-40°C.

## Cria

### Mixing Rate 200g/litre

Age	Feeds per day	Milk per feed (mL)	Grams per feed (g)	Daily volume (L)
day 1	6	ExcelPlus Colostrum as per guidelines		
2-4	6	150ml	30g	0.9L
5-7	4	200ml	50g	1.0L
8-21	3	300ml	60g	0.9L
22 to weaning	3	350ml	70g	1.1L

\* Cria will stop feeding when they are full so offer more than you expect them to drink.

# MILLIGANS

**FEEDS**

<b>Address</b>	1 Chelmer Street Oamaru, 9400
<b>Postal</b>	P.O. Box 85 Oamaru 9444
<b>Phone</b>	03 433 1113
<b>Fax</b>	03 434 1119
<b>International calls</b>	+64 3 434 1113
<b>E-mail</b>	<a href="mailto:feedsales@milligans.co.nz">feedsales@milligans.co.nz</a>
<b>Freephone</b>	0800 STOCKFEED
<b>Website</b>	<a href="http://www.milligansfeeds.co.nz">www.milligansfeeds.co.nz</a>