

# FEED GUIDE

CALVES, LAMBS  
& OTHER ANIMALS



**NZAGBIZ**

# THE IMPORTANCE OF YOUNG ANIMAL NUTRITION

The health and well-being of animals in their infancy is crucial to ensuring their maximum potential throughout the rest of their life. Without an optimum nutrition plan in place, young animals may suffer from impaired growth, reduced immunity, and higher susceptibility to disease.

As the cost of feed is a considerable portion of production costs, it is essential that the quality of the feed sourced matches the nutrition requirements of animals. It is also crucial for the rumen and digestive system to have the kick start needed for the optimal development. This helps the transitions from milk to meal feed, milk to pasture, and meal feed to pasture.

**WE ARE FOCUSED  
ON PROVIDING  
TRUSTED  
NUTRITION TO  
ENSURE YOUNG  
ANIMALS THRIVE.**

As with any feed it is important to source products that are highly reputable and made from high quality ingredients which have been designed and based on comprehensive formulations,



**GIVE  
TOMORROW'S  
STOCK THE BEST  
START IN LIFE  
TODAY.**

backed by quality scientific research, to trust that young animals will receive the very best nutrition they need.

The NZAgbiz milk replacer range is manufactured from the high quality raw materials sourced from Fonterra which are processed through extensive testing regimes. Once formulated, all products are thoroughly tested again – tolerance pass marks are set deliberately high to guarantee the products are of the highest quality before entering the marketplace.

This Feed Guide outlines the key benefits and usage details of our core products – each formulated for New Zealand conditions to help see your animals through their early developmental stages. Ask for NZAgbiz – give tomorrow's stock the best start in life today.

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Ancalf™, Ancalf Finisher™, Ankid™, Anlamb™, Biosupport™, Brutus™, Jumpstart™, Nutricalf™ and Novolyte™ are trade marks of the Fonterra group of companies.

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# REARING CALVES

PRODUCT USAGE  
& BEST PRACTICES

## ANCALF

Ancalf has been New Zealand's premium calf milk replacer (CMR) since 1966. Manufactured with New Zealand whole milk powder and guaranteed to curd, Ancalf also contains key nutrients calves need to build strength fast and maintain optimum growth. Ancalf can be fed from day four through to weaning.

Ancalf can be used in conjunction with Jumpstart Full Cream Colostrum from day 2-4.



- Provides calves with the very best start in life optimising growth and performance
- Made from whole milk powder
- Guaranteed to curd
- Can be fed from day four through to weaning
- Contains Actigen and essential vitamins to improve calf performance
- Highly soluble, good mixability
- Can be fortified with whole milk
- Contains a coccidiostat to combat the effects of coccidiosis

### TYPICAL ANALYSIS

Protein	26%
Fat	20%
Lactose	43.5%
Moisture	3.5%
Minerals	7%



## ANCALF FINISHER

Ancalf Finisher is a cost-effective CMR, intended to be fed from 14 days of age onwards. Ancalf Finisher is designed as a finishing CMR in a two-stage feeding system.

This should begin with high quality colostrum, whole milk or a premium CMR, such as Ancalf and completing the rearing up to weaning with Ancalf Finisher.



REARING CALVES

- Great follow on from colostrum, whole milk or a premium CMR such as Ancalf
- Can be fed from 14 days (21 days recommended) through to weaning
- Contains Actigen and essential vitamins to improve calf performance
- Highly soluble, good mixability
- Can be fortified with whole milk
- No coccidiostat, suitable for bobby calves

### TYPICAL ANALYSIS

Protein	22%
Fat	20%
Lactose	48.5%
Moisture	3%
Minerals	6.5%

## NUTRICALF

Nutralf is a precise blend of whey based dairy ingredients and specially formulated vegetable fats plus protein developed in conjunction with Denkavit.

Nutralf is a versatile CMR that can be fed from day four, fortified with whole milk and used in automatic feeders.

Nutralf contains a formulated vitamin and mineral premix.

- High quality dairy and vegetable ingredients
- Highly soluble, good mixability
- Contains a Coccidiostat to combat the effects of coccidiosis
- Contains Actigen and essential vitamins
- Can be fortified with whole milk
- Can be fed from day four through to weaning



### TYPICAL ANALYSIS

Protein	24%
Fat	20%
Lactose	46.3%
Moisture	2.5%
Minerals	7.1%

## PRODUCT USAGE GUIDE

CALVES	Day 1	Day 2-4	Day 5-13	Day 14-21	Day 22 weaning
Jumpstart	●	●			
Ancalf		●	●	●	●
Nutricalf			●	●	●
Ancalf Finisher				●	●
Biosupport	●	●	●	●	●
Novolyte	●	Use when required - See p48			

### When feeding CMR

- Mix milk powder prior to feeding, but not the day before as settling can occur and milk can be affected by bacterial growth
- Store opened bags of milk powder in a dry, cool, rodent free environment to avoid contamination or spoiling
- Mix powder thoroughly in fresh, clean, warm water
- Use a digital thermometer to ensure correct temperatures (38-40°C)
- Warm milk should be used as energy will be consumed heating cold milk up to blood temperature for digestion
- Add milk powder to half the final volume, mix well, then top up to the required volume with warm water
- Rinse and clean all equipment after every feed and disinfect equipment regularly. Ensure teats do not become blocked
- Increase feeding levels in stages, making changes over time to allow calves to adjust
- Do not over or under feed by changing the concentration of milk powder - always follow the suggested feeding rates
- Be observant - a teat may block, bullying may occur in compartments, watch for slow feeders
- Ideally, use a compartment feeder for the first three weeks, especially when feeding higher concentrate milk on the once-a-day system
- Maintain a consistent feeding time, preferably with the same person feeding the calves
- Ensure that clean water and concentrated feed is always available
- Calves are usually fed in the morning and again in the evening
- As a guide, eight hours should elapse between feeds

## CMR FEEDING INSTRUCTIONS

### TWICE A DAY FEEDING

Mixing rate: 150g/L

Age	Volume per feed*	Grams per feed	Grams per day
0-4 days	Colostrum or Jumpstart fed ad-lib		
5-10 days	2L	300g	600g
11-21 days	2.5L	375g	750g
22 days to weaning	3L	450g	900g

\*Add CMR to 1/2 the 'volume per feed' and mix thoroughly. Top up with water to correct volume and temperature.

### ONCE A DAY FEEDING

Mixing rate 11-21 days old: 300g/L

Mixing rate 22 days old to weaning: 350g/L

Age	Volume per feed*	Grams per feed	Grams per day
0-4 days	Colostrum or Jumpstart fed ad-lib		
5-10 days	Follow twice a day feeding guide above		
11-21 days	2L	600g	600g
22 days to weaning	2L	700g	700g

\*Add CMR to 1/2 the 'volume per feed' and mix thoroughly. Top up with water to correct volume and temperature.

**Weaning age:** a combination of weight and age is used as a “rule of thumb” when making the weaning decision e.g. a minimum age of 8 weeks and weight of 90 kg can be set for weaning. If a calf is 90kg at 7 weeks then another week should pass before “she’s too young to be off milk”.

**Weaning weight:** individual calves should reach a minimum weight prior to weaning, and this weight should not be used as a group average. Feeding systems should also be considered e.g. weight should be higher for calves that are reared on high milk systems without meal access.

**Rumen development:** a calf’s rumen development is the most important factor to consider when making the weaning decision. The only way this can be assessed is by measuring the amount of concentrate or pasture they are readily eating, which should be at least 1 kg/day of meal or 2 kg/day of pasture.

**Competing within a group:** calves need to be competing with the group before they are weaned. Any that aren’t should be held back until they are.

## TWICE-A-DAY VS ONCE-A-DAY FEEDING

MILK FED TWICE-A-DAY	MILK FED ONCE-A-DAY
<ul style="list-style-type: none"> <li>Volumes fed up to 6L/calf/day with standard mixing rates</li> </ul>	<ul style="list-style-type: none"> <li>Volume fed as low as 2L/calf/day with increased mixing rates</li> </ul>
<ul style="list-style-type: none"> <li>Total intake to weaning between. 20kg-30kg of CMR per calf</li> </ul>	<ul style="list-style-type: none"> <li>Total intake to weaning approx. 20kg of CMR per calf</li> </ul>
<ul style="list-style-type: none"> <li>Calf can tend to eat smaller quantities of meal (40-50kg) as they are fuller</li> </ul>	<ul style="list-style-type: none"> <li>Calf meal intake often increases to make up for loss of second feed</li> </ul>
<ul style="list-style-type: none"> <li>Typical rumen development</li> </ul>	<ul style="list-style-type: none"> <li>More accelerated rumen development</li> </ul>
<ul style="list-style-type: none"> <li>Typical weaning timeframe</li> </ul>	<ul style="list-style-type: none"> <li>Potential to wean earlier due to earlier rumen development</li> </ul>
<ul style="list-style-type: none"> <li>More labour intensive</li> </ul>	<ul style="list-style-type: none"> <li>Less labour intensive</li> </ul>
<ul style="list-style-type: none"> <li>Fortification of CMR with colostrum possible</li> </ul>	<ul style="list-style-type: none"> <li>Fortification of CMR with colostrum possible</li> </ul>
<ul style="list-style-type: none"> <li>Water should be freely available</li> </ul>	<ul style="list-style-type: none"> <li>Water should be freely available</li> </ul>
<ul style="list-style-type: none"> <li>Ideal for getting beef calves up to saleable weights</li> </ul>	<ul style="list-style-type: none"> <li>Ideal for dairy heifer calves for developing rumen into milk producing cows</li> </ul>
<ul style="list-style-type: none"> <li>Note: the above are general guidelines, no single system of rear is perfect and all farms and conditions are different. The most important thing is to make sure your system works best for you</li> </ul>	

### Fortification of Ancalf

Where whole milk (inc. Colostrum) availability is limited, or not cost effective, Ancalf can be used in conjunction with whole milk to meet the daily feeding requirements of the calf.

Ancalf powder is to be mixed with warm water at a rate of 150g/L and then combined with whole milk to reach the desired feed volume. A common ratio used is 50% whole milk and 50% Ancalf.

Where a concentrated Ancalf feed is required for once-a-day systems, Ancalf powder can be added directly to the whole milk at a rate of 150g/L of whole milk.

Note: A typical litre of milk is equivalent to 150g of Ancalf powder.

## CURDING VS NON-CURDING

There is a debate around whether curding or non-curding is more beneficial. It is important to understand the differences between them so an informed choice can be made about what to feed your young animals.

### Benefits of whole milk CMR

The natural way a calf digests milk is by having it curd in the abomasum - the calf's fourth stomach. When a calf drinks milk or milk replacer, it bypasses the rumen and enters the abomasum. Here it is split into whey and casein which curds by natural rennet and enzymes. Whey is a watery substance that is quickly passed through the intestines and digested whereas the curd is a solid, yoghurt-like substance that stays in the abomasum and is digested slowly over time.

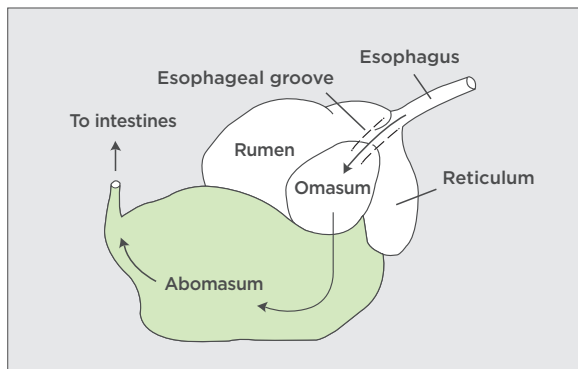
Scientific research suggests that a curding milk replacer fed to calves less than 14 days old can;

- Increase growth rates
- Develop insulating fat around the organs
- Lower mortality rates in calves facing bacterial infection

*(Information source: Beef+Lamb Research and Development, June 2012.)*

### Curd Quality - Important points:

- Casein based milk powders must curd sufficiently to be digested by the calf or lamb
- Milk powders that do not curd sufficiently or consistently will cause stomach upset and scouring
- Ancalf, Ancalf Finisher and Anlamb are tested by NZAgbiz and are not cleared for sale unless they curd to our standard



## CALF SELECTION

Once you've selected your calves, they will require care and feeding to ensure optimum health.

Rearing healthy calves begins with a careful selection process. Make sure your suppliers are reputable and build good relationships with them. Buy from as few suppliers as possible and ideally purchase from only those who have vaccinated their herd against rotavirus. Check your calves have received colostrum for at least the first four days following birth.

To prevent infection, the navel should be treated with an approved iodine solution immediately after birth and following transportation. Transportation can be stressful for calves and detrimental to their health. Drive with care when calves are in tow and handle calves gently upon arrival. In addition, it is recommended that only electrolytes (approx. 4L) should be offered at the first feed.

AVOID	CHECK
<ul style="list-style-type: none"> <li>• Twins</li> <li>• Induced calves</li> <li>• Freebies</li> <li>• Calves that have been treated with antibiotics</li> <li>• Mixing age groups of calves</li> </ul>	<ul style="list-style-type: none"> <li>• The umbilical cord is dry</li> <li>• The calves' eyes are not sunken</li> <li>• The ears are not droopy</li> <li>• Calves should be over 40kg at four days (excluding Jersey calves)</li> <li>• Ensure calves have received colostrum within first 12 hours after birth and up to four days post birth</li> </ul>

## CARING FOR NEW ARRIVALS

Keep a close eye on your calves to ensure that they are feeding correctly to help prevent illness.

### Colostrum

Colostrum helps to prevent disease. It is high in both fat and protein, providing an excellent source of energy for new-born calves. Immunoglobulins (IgG) in the first milk protect the calf's immune system, however these drop by 75% in subsequent milking's.

Calves should receive at least 10% of their body weight (approx. 4L) in good quality Colostrum or Jumpstart (Refer to p46) within the first 12 hours after birth. That is 2L within four hours following birth and another 2L within 10 hours. Ideally colostrum should be fed for four days post birth.

### Feeding

- Check and spray the umbilical cord daily for the next three days following arrival
- Start initial feeding two hours after arrival with warm milk or Novolyte electrolytes
- Consider a quality probiotic (such as Biosupport - Refer to p47) to help calves transition to their new environment
- Check teat quality and quantity - there should be spare teats e.g. eight calves to a ten-teat feeder
- Check for slow feeding calves. If necessary reassign calves on drinking speed and vigour
- Warm feeding (38-40°C) will encourage fluid intake and prevent nutritional upsets
- A gut modifier such as Sodium Bentonite (in the meal trough) is useful
- Clean, fresh ad-lib water and a fibre source must be available from day one
- Bring warm milk to calves and keep milk lines as short as possible
- Calves should be fed at the same time each day

### Signs of illness

It is important to monitor the health of the calves daily to recognise symptoms of illness quickly. Common warning signs of illness include; depressed appearance, slow drinking, reluctant to stand or walk, scours.

- Check faeces at feeding for colour, smell, consistency or blood
- If you suspect illness, check the calf's temperature - the normal temperature for a calf is 38°C. If in doubt consult your vet



## FACILITIES & PROCESSES

Rearing facilities should provide adequate shelter to ensure calves stay healthy.

### The rearing facility

- Must be dry and draught free for calves to regulate body temperature. Calves should be protected from wind and rain in a structure twice as long as wide
- Cover the floor surface with materials such as sawdust, shavings, post peelings or wood chip to a depth of at least 200-300mm. Ideally the floor should be lower at the front to help drain effluent and water. Regularly top up the bedding so it is clean and dry
- Good ventilation is essential and is best situated where the walls meet the ceiling. It's easier to ventilate across the shed, not down the length. Ventilation should be adaptable so the use of boards, shutters or wind cloth is recommended

### Spacing the calves

- Calves are less stressed and have higher intakes in smaller groups. The shelter should provide a minimum of 1.5m<sup>2</sup> per calf and where possible, minimise calf contact between pens. The best approach is 10-20 calves per pen and no more than 100 calves per shed
- Having more than one shed allows for easier separation of age groups and feeding levels, provides a safety barrier between sheds in case of disease outbreak and will allow a shed to be rested for cleaning and sterilisation between calves

### Feeding facilities

- Each pen must have clean, quality water, which should be checked and cleaned daily. In hot conditions, restricted feeding systems, high meal/fibre intakes or scours, an additional 2-6L of water per calf per day is required
- Meal troughs should have sufficient space for feeding at least half of the calves at the trough at any one time. Provide a minimum of 300mm of trough space per calf
- Keep milk lines as short as possible and ensure there is no stale milk left in hoses between feeds

## Cleaning the rearing area

- Use a broom to remove any excess material in laneways. Do not use a high-pressure hose inside the shed, as this will aerosol bacteria and viruses to calves in other pens
- Spray the rearing area, feeding utensils and teats with approved virucidal at least twice a week, daily during a disease outbreak
- Rodents and birds must be controlled
- Isolate sick calves to reduce risk of spreading disease

## MEAL & ROUGHAGE FEEDING

**Meal helps stimulate rumen function and prepare the rumen for an all grass diet, allowing for a smooth transition from milk to grass feeding.**

### Fibre source

Fibre (hay and straw) contribute to rumen development but is lower in energy and therefore should not exceed more than 10% of the diet. Hay has higher energy, palatability and digestibility than straw. All fibre sources should be free of moulds and have a pleasant odour.

### Meal source

The quality of the meal is very important as this will drive intake, affect milk feeding requirements, and palatability. Characteristics of a quality meal are:

- Highly palatable and highly digestible - molasses can be added to help achieve this
- Protein levels between 16-20%. Feed the highest level where possible
- High in vitamins and minerals and containing rumenal buffers to prevent acidosis
- Containing a Coccidiostat (e.g. Coccistop or Bovatec)

### Other considerations:

- Calves can be weaned off milk when meal consumption is a minimum of 1kg per calf per day. This should increase to 1.5-2kg per day in the next 4 weeks
- Bird fouling can contaminate meal feeders - add plastic flaps or fill troughs in the evening
- As meal consumption increases it is important to allow space for simultaneous access to the trough. Allow 300mm of head space per calf
- As meal intake increases, water intake increases- feed consumption will be limited if there is not sufficient access to clean ad-lib water

## Weaning management

- A combination of weight and age is used as a “rule of thumb” when making the weaning decision e.g. a minimum age of 8 weeks and weight of 90 kg can be set for weaning. If a calf is 90kg at 7 weeks then another week should pass before “it’s too young to be off milk”
- Weigh a sample of calves to monitor target growth rates before making weaning or management decisions. Weigh bands are a useful tool to approximate calf weights
- Feeding systems should also be considered e.g. weight should be higher for calves that are reared on high milk systems without meal access. They should be growing at 1kg per day and consuming at least 1kg of meal per day when weaned
- Follow a transition period when weaning onto pasture by feeding 1-2kgs of pellets per day up to four weeks after weaning from milk
- Make sure shelter, water and feed are still available after weaning e.g. shelter belt

## MAINTAINING HEALTHY CALVES

### 10 key factors to rearing healthy calves

1. Select healthy, quality calves initially
2. Ensure correct colostrum levels are fed for at least four days
3. Minimise stress during and after transportation by driving carefully and handling calves gently upon arrival
4. Shelter, pen size, ventilation, drainage and bedding must be of a high standard
5. Make sure that the CMR or milk volume and frequency of feeding is appropriate
6. Supply a good quality meal, fibre and clean water
7. Good quality, clean feeding utensils are important
8. Monitor calves daily to check for early warning signs of health issues
9. Prevent disease by treating ailments at therapeutic levels
10. Employ quality staff to look after the calves

## ASSESS CALF HEALTH USING YOUR SENSES

When assessing calf health, it is essential to be observant to their condition and behaviour.

Using your senses will help to determine if there is any cause for concern.

### LOOK

- Are the calves drinking and eating as normal?
- Are their eyes bright and alert?
- Is their coat soft and shiny?
- Examine the navel for swelling, redness and discharge
- Watch the calves moving, standing up and stretching to ascertain steadiness and energy
- Check the colour and consistency of the faeces for abnormalities
- Is there a discharge from the mouth or nose e.g. saliva, mucous or blood?

### SMELL

- Check the smell of the milk, meal, hay and water
- Does the bedding and air smell clean, dry and ammonia free?
- Do the faeces smell normal or foul?

### LISTEN

- Are the calves grinding their teeth, bellowing or coughing?

### CHECK

- The milk, meal, fibre and water are fresh
- Any additional products offered to the calves should be palatable and free from fungi and moulds
- Temperature: Use a digital thermometer to diagnose illness early and monitor treatment. The normal temperature of a calf will vary, but as a guide should be approx. 38°C. Compare the temperature of another pen mate before checking the sick calf

## IDENTIFYING INFECTION

There are some common infections calves are susceptible to.

It's important to identify these warning signs of illness and know how to control and prevent infectious diseases among calves. If in doubt, consult your veterinarian.

SIGNS OF ILLNESS		POSSIBLE SYMPTOMS
Lame/reluctant to stand		Injury, joint ill (navel infection), diarrhoea
Swollen navel		Navel infections, hernia, pizzle sucking
Sunken eyes		Dehydrated, also likely to be scouring or losing condition
Reluctant to drink or slow drinking		Any infectious disease, injuries to the mouth or tongue, poor quality milk
Teat/tubing quality		White or yellow faeces
Scours	Nutritional	Faeces watery or yellow or foul smelling, contains mucous or blood. Temperature elevated above 39°C
	Infectious	Often appears normal in the first three days. Check if the calf is 'bright' and the temperature normal. A 'dull' calf with a high temperature is indicative of Salmonella or Coccidiosis
Blood in the faeces		Respiratory infection from poor ventilation or infectious agents
Coughing or rapid respiration		Cold or wet conditions, feeding cold milk, draughty calf shed
Shivering		Abdominal pain, colic, peritonitis, gut catastrophes - ulcers, twisted bowel, indigestion-overfeeding of milk, cold milk, gorging on meal. Poor quality milk, fibre or meal kicking at the belly
Bloat		Cold milk feeding - milk in rumen, over-drinking or gorging on meal, young fresh grass, Clostridia diseases
Salivation		Indication of high fever - check temperature Mouth, tongue or cheek lesions, injured jaw, ulcers and abscesses
Grinding teeth		Abdominal pain, scours, lack of fibre, boredom
Pizzle sucking		Low volume feeding, unsatisfied sucking instinct, lack of water
Hair Loss		Often after a bout of severe scours Excessive cold and wet-standing in mud, lice, fungal skin infections

## INFECTIOUS AGENTS

Scours or diarrhoea in calves is usually nutritional or infectious in origin. For accurate diagnosis, vet assistance or laboratory testing is required.

Generally, a grey or milky scour will be nutritional – short lived and will have no adverse effect on the animal. However, frequent, yellow, bloody, foul smelling scouring is almost certainly something serious.

INFECTIOUS AGENT	POSSIBLE SYMPTOMS
BOVINE VIRUS (Bovine Viral Diarrhoea)	<ul style="list-style-type: none"> <li>• Acute scouring</li> <li>• Salivation</li> <li>• Shallow ulcers on the tongue and gums</li> <li>• High temp 39-40°C</li> </ul>
CAMPYLOBACTER	<ul style="list-style-type: none"> <li>• Acute, fous smelling, watery scouring, usually of short duration</li> </ul>
COCCIDIOSIS	<ul style="list-style-type: none"> <li>• Scouring with mucous and blood, straining</li> <li>• Presence of blood around the anus.</li> <li>• Temperatures remain normal</li> </ul>
CORONA VIRUS	<ul style="list-style-type: none"> <li>• Acute scouring</li> </ul>
CRYPTOSPORIDIOSIS	<ul style="list-style-type: none"> <li>• Acute, pale, watery scouring for 3 days</li> <li>• High temps 39-40°C</li> </ul>
ESCHERICHIA COLI (E. Coli)	<ul style="list-style-type: none"> <li>• Acute scours</li> <li>• High temps 39-40°C</li> <li>• Low colostrum intake</li> </ul>
ROTAVIRUS	<ul style="list-style-type: none"> <li>• Acute, fous smelling, watery scouring</li> <li>• High temps 39-40°</li> </ul>
SALMONELLA	<ul style="list-style-type: none"> <li>• Acute, fous smelling, watery scouring</li> <li>• High temps 39-40°C</li> </ul>

<b>RISK</b>	<b>TREATMENT</b>	<b>OTHERS AFFECTED</b>
<ul style="list-style-type: none"> <li>• Small number of calves at any one time</li> <li>• Medium contagiousness</li> <li>• Low mortality</li> </ul>	<ul style="list-style-type: none"> <li>• Antibiotics</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<ul style="list-style-type: none"> <li>• First 3 weeks of life</li> <li>• Medium contagiousness</li> </ul>	<ul style="list-style-type: none"> <li>• Rehydration (Refer to Novolyte p48)</li> <li>• Improve water supply</li> </ul>	<ul style="list-style-type: none"> <li>• Humans</li> <li>• Pets</li> </ul>
<ul style="list-style-type: none"> <li>• Occurs from 3 weeks</li> <li>• Not fatal, inhibits growth</li> <li>• Transmitted through faeces of calves, adult stock and contaminated water</li> </ul>	<ul style="list-style-type: none"> <li>• Feed sources medicated with a Coccistop</li> <li>• Possible antibiotics</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<ul style="list-style-type: none"> <li>• Secondary to Cryptosporidiosis and Rotavirus</li> <li>• Low mortality</li> </ul>	<ul style="list-style-type: none"> <li>• Rehydration (Refer to Novolyte p48)</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<ul style="list-style-type: none"> <li>• In conjunction with Rotavirus</li> <li>• Occurs in first 10 days</li> <li>• Low mortality if treated</li> </ul>	<ul style="list-style-type: none"> <li>• Rehydration (Refer to Novolyte p48)</li> <li>• Maintain energy</li> </ul>	<ul style="list-style-type: none"> <li>• Humans</li> <li>• Pets</li> </ul>
<ul style="list-style-type: none"> <li>• High mortality - fast acting</li> <li>• Contagiousness depends on strain</li> </ul>	<ul style="list-style-type: none"> <li>• Antibiotics</li> <li>• Rehydration (Refer to Novolyte p48)</li> </ul>	<ul style="list-style-type: none"> <li>• Humans</li> <li>• Pets</li> </ul>
<ul style="list-style-type: none"> <li>• High mortality if not treated quickly</li> <li>• Highly contagiousness</li> </ul>	<ul style="list-style-type: none"> <li>• Rehydration (Refer to Novolyte p48)</li> <li>• Vaccination</li> </ul>	<ul style="list-style-type: none"> <li>• Humans</li> <li>• Pets</li> </ul>
<ul style="list-style-type: none"> <li>• High and rapid mortality</li> <li>• Highly contagiousness</li> <li>• Poor recovery - if any</li> </ul>	<ul style="list-style-type: none"> <li>• Antibiotics</li> <li>• Antipyretics</li> <li>• Rehydration (Refer to Novolyte p48)</li> <li>• Vaccination</li> </ul>	<ul style="list-style-type: none"> <li>• Humans</li> <li>• Pets</li> </ul>

## REHYDRATION DURING SCOURING

- Calves suffering from scouring lose high amounts of water from the body in the form of salts (electrolytes) and sugars (energy). This can cause alarming weight loss, therefore lost fluids and salts must be replaced as quickly as possible to maintain calf energy
- A good quality oral electrolyte such as Novolyte (p48) at therapeutic levels during the diarrhoea and recovery period is the most efficient way to ensure optimum calf health
- Oral electrolytes are lower in energy than milk, so milk feeding should be continued during the scouring period. Milk should never be withheld for longer than 24 hours

CALF SYMPTOMS	% DEHYDRATION
Diarrhoea only	5% - even if only scouring for one day
Eyes slightly sunken, skin losing elasticity, calf staggers on its feet, but is still suckling	7%
Eyes sunken, skin slow to flatten if pinched, gums sticky, calf depressed	9% - additional intravenous fluids need to be administered by a vet
Eyes very sunken, skin won't flatten out if pinched, calf cannot stand	12% - additional intravenous fluids need to be administered by a vet

### CALF REHYDRATION CALCULATION

#### Rehydration + Maintenance volumes

Multiply the calf weight by the % of dehydration (from table above)

**Example:** 40kg calf x 7% dehydration = 2.8L electrolyte to correct the fluid loss

#### ALSO

Add a further 10% of the body weight in fluids for maintenance that day

**Example:** 40kg calf requires a minimum of 4L of fluids/day

**TOTAL:** 6.8L or more

#### Key Points:

- Electrolytes (e.g. Novolyte p48) can be offered via a teat feeder, trough, bucket or tube feeder
- Use only high-quality electrolytes such as Novolyte, to ensure a balanced intake of salts and energy
- Warm feeding (approx. 38°C) is recommended to increase voluntarily suckling and drinking
- No more than 2L should be given per feed



# NOTES

A series of horizontal dotted lines for taking notes, spanning the width of the page below the 'NOTES' header.



# **REARING LAMBS & GOAT KIDS**

PRODUCT USAGE  
& BEST PRACTICES

## ANLAMB

Anlamb is specifically formulated from New Zealand sourced milk powder to supply lambs with the nutritional requirements for maximum growth and development.

As lambs are often difficult to hand rear, they require the finest quality raw materials for growth. The formulation contains essential vitamins and minerals required for early growth and development.



- Made from the best quality casein protein ingredients
- Can be used for multiple infant species including lambs, goat kids, foals, fawns, puppies, piglets and cria
- Strong curd
- Soluble, good mixability
- Contains no Coccidiostat so is safe for all label species
- Available in 20kg, 10kg and 5kg packs

Mixing rate varies by infant animal species. Refer to the table on pages 54-57 for specific infant animal feeding guidelines.

### TYPICAL ANALYSIS

Protein	26%
Fat	26%
Lactose	38%
Moisture	3.5%
Minerals	6.5%

### PRODUCT USAGE GUIDE

LAMBS/ KID GOATS	Day 1	Day 2-4	Day 5-13	Day 14-21	Day 22 weaning
Jumpstart	●	●			
Anlamb		●	●	●	●
Biosupport	●	●	●	●	●
Novolyte	●	Use when required - See p48			

## ANKID

Ankid goat kid milk replacer is a specialised whey based milk replacer developed by Denkavit in Holland specifically for rearing goat kids in New Zealand conditions.

Ankid is made from predominantly whey based milk ingredients to assist with rumen development for future milking goats and minimise the risk of abomasal bloat. It also contains dairy skim milk powder that provides excellent protein to assist growth rates to achieve good body condition early in life.

- High quality dairy and vegetable ingredients
- Highly soluble, good mixability
- Contains oregano oil as a natural defence to coccidiosis
- Can be used in automatic feeders

Mixing rate is 175g/litre warm water - approx. 40°C. Refer to the table on pages 58 for specific feeding guidelines.



### TYPICAL ANALYSIS

Protein	22%
Fat	24%
Total Carbohydrate	44.2%
Moisture	2.8%
Ash	6.8%
Fibre	0.2%

### PRODUCT USAGE GUIDE

GOAT KIDS	Day 1	Day 2-4	Day 5-13	Day 14-21	Day 22 weaning
Jumpstart	●	●			
Ankid		●	●	●	●
Biosupport	●	●	●	●	●
Novolyte	●	Use when required - See p48			

## FEEDING LAMBS WITH ANLAMB

### Mixing

- To make one litre of mixed milk replacer, 200g of Anlamb milk replacer is required
- Fill the mixing container with half the required amount of warm water (40°C)
- Add Anlamb and mix thoroughly, then top up to the correct volume

*Wash the bottle and teat thoroughly after every feed.*

### Feeding rates

All feeding rates are based on average weights and age. Refer to p54 for further detail.

For use in automatic feeders, set the machine to a rate of 225g of Anlamb per litre of water. This equates to 200g/L of mixed Anlamb.

### Key recommendation:

- Feed Biosupport, NZAgbiz potent probiotic product, which contains one billion good bacteria per gram. Refer to p47 for further information
- Ensure clean fresh water is available ad-lib
- Introduce meal from week two

## FEEDING GOAT KIDS WITH ANLAMB

### Mixing

- To make one litre of mixed milk replacer, 160g of Anlamb is required
- Fill the mixing container with half the required amount of warm water (40°C)
- Add Anlamb and mix thoroughly, then top up to the correct volume

*Wash the bottle and teat thoroughly after every feed.*

### Key recommendations

- Always follow the feeding instructions and do not increase volumes or concentrations above recommended levels
- Feed Biosupport, NZAgbiz potent probiotic product, which contains one billion good bacteria per gram. Refer to p47 for further information
- Ensure clean fresh water is available ad-lib

## FEEDING GOAT KIDS WITH ANKID

### Mixing

- To make one litre of mixed milk replacer, 175g of Ankid is required
- Fill the mixing container with half the required amount of warm water (45°C)
- Add Ankid and mix thoroughly with a whisk, then top up to the correct volume

### Feeding rates

For use in automatic feeders, set the machine to a rate 190g of Ankid per litre of water. This equates to 175g/L of mixed Ankid.

### Key recommendations:

- Feed Biosupport, NZAgbiz potent probiotic product, which contains one billion good bacteria per gram. Refer to p47 for further information
- Ensure clean fresh water is available ad-lib
- Introduce meal from week two

#### IMPORTANT POINTS TO NOTE:

- Always use fresh clean water when mixing milk replacer
- Thoroughly clean mixing and feeding equipment after each feed
- Any changes to feeding rates should be made gradually
- Do not overfeed animals. Overfeeding can contribute to bloat
- Bloat is also linked to bad bacteria in the gut. Refer to p34 for further information

## ARRIVAL & MILK FEEDING

### Lambs arriving on farm

Lambs require a shelter to live in which needs to be secure, clean and safely penned off. An individual lamb requires approximately 16 to 20 square feet of space. The shelter will require bedding for sleeping to provide warmth, insulation and comfort e.g. straw, hay, sawdust, wood shavings, and leaves. Keep this area clean and dry to prevent bacteria accumulating and to prevent the spread of disease. Always ensure there is plenty of water available in the lamb pen.

### Hygiene

The lamb's navel should be checked and sprayed with iodine or disinfectant to prevent a navel infection. Whilst hand-rearing, and particularly for the first few weeks, it is important to keep all bottles and teats thoroughly clean to prevent infections.

Diluted bleach can be used as a disinfectant, but rinse the utensils well before re-using for feeding.

### Colostrum

Colostrum is essential for young lambs. A new-born lamb should receive good quality colostrum from its mother or Jumpstart (Refer to p46) within 6-12 hours of birth. This colostrum feeding would naturally be continued for the next four days. If this has not occurred the chances of survival are greatly reduced. After ensuring the lamb has received colostrum, Anlamb should be introduced.

### Feeding

Always follow feeding instructions. A lamb will continue to drink as much as possible, but the most natural way a lamb feeds is little and often. Lambs have small stomachs so be cautious when feeding large volumes of milk replacer as this can cause discomfort and bloat. We recommend 4-6 feeds per day depending on age and weight. To reduce overload feeding, check the hole in the teat is not too big - If the milk is free flowing from the teat, the hole is too big. If the lamb is weak and unable to suckle, a lamb reviver (tube feeder) should be used to feed colostrum and/or a lamb milk replacer.



## OTHER FEED WEANING ISSUES

### Water and hard feed

Fresh water must be available at all times and a meal concentrate and a fibre source may be offered from day seven onwards to promote the development of the digestive system.

Once the lamb reaches 4 to 6 weeks old, 50% of its nutrients should be from solid feed such as pasture or grain.

### Weaning

Weaning is the transition of the lamb's diet from milk replacer to solid feed. Lambs should be eating solid feed for a minimum of 10 days, and be drinking water freely at the time of weaning. As a general guide, lambs should be at least 40 days old and weigh approximately 15kg, before weaning.

Lambs should be weaned gradually. This can be done by reducing the frequency of feeds to one 500mL feed per day, which should be introduced for at least a week before the lamb is taken off milk.

### Troubleshooting health issues

- If your lamb is showing signs of bloat, refer to the Bloat information on p34
- Scouring in lambs can also be caused by overfeeding. Once again it is important to follow feeding instructions
- Some plants can be poisonous to lambs e.g. rhododendrons, so make sure the lamb pen is secure
- Coldness is a common cause of lamb sickness when they are young so ensure measures are in place to keep them warm and dry e.g. cardboard box, under-blankets

### Anlamb bottle

Anlamb bottles are manufactured from durable recycled polyethylene and come with its own lamb teat. Feeding measures on the side of the bottle ensures that the lamb receives the correct amount of LMR from day one to weaning. Anlamb bottles are available from all leading rural supply stores.



## BLOAT IN LAMBS & GOAT KIDS

### What is bloat?

Abomasal bloat is a major cause of discomfort and can lead to death in lambs and kids.

Bloat is caused by clostridial bacteria which feed on lactose in the milk and convert lactose to lactic acid. This creates an environment where good bacteria cannot survive and harmful bacteria flourish. As a result gas is released into the abomasum which expands the stomach and can cause death either by compressing other organs causing them to fail, or rupturing the stomach wall.

Bottle fed lambs and kids are fed a higher volume of milk in fewer feeds, than when feeding from the ewe or doe. This causes a larger amount of lactose in the stomach and in-turn more lactose for bacteria to feed on. This results in bacteria multiplying rapidly and producing large amounts of gas.

### Recommendations

- All lambs and goat kids should receive colostrum (or Jumpstart) within six hours of birth. This promotes immune development and protection against bloat causing clostridia bacteria
- Lamb or goat kid milk replacer should be fed little and often. Do not increase volumes to reduce the amount of feeds required, as they have small stomachs. We recommend 4-6 feeds per day depending on the age
- Lambs or kids showing signs of bloat should be fed smaller quantities, more often
- Decreasing milk temperature to approximately 4°C (approx. refrigerator temperature) helps prevent bloat, as bacteria thrive at warmer temperatures. Always mix warm and then allow the milk to cool.  
**Note: warm feeding is recommended for healthy lambs and kids to achieve natural protein curdling in the stomach**
- Yoghurtising milk develops cultured bacteria that can help reduce bloat
- Check the size of the hole in the teat. Milk should only trickle out when the bottle is tipped upside down, not flow freely
- Some lambs and kids have a tendency to over feed even when not hungry – always follow our feeding recommendations
- Feed Biosupport, NZAgbiz potent probiotic product, which contains one billion good bacteria per gram. Refer to p47 for further information





# REARING OTHER ANIMALS

PRODUCT USAGE  
& BEST PRACTICES

## ANLAMB

Anlamb is specifically formulated from New Zealand sourced milk powder to supply lambs and other infant animals with the nutritional requirements for maximum growth and development.

Anlamb can be used for multiple infant species including lambs, goat kids, foals, fawns, puppies, piglets and cria.

- Made from the best quality casein protein ingredients
- Strong curd
- Contains essential vitamins and minerals required for early growth and development.
- Soluble, good mixability
- Contains no Coccidiostat so is safe for all label species
- Available in 20kg, 10kg and 5kg packs

Mixing rate varies by infant animal species. Refer to the table on pages 54-57 for specific infant animal feeding guidelines.



### TYPICAL ANALYSIS

Protein	26%
Fat	26%
Lactose	38%
Moisture	3.5%
Minerals	6.5%

## BRUTUS

Brutus is a high protein milk powder supplement for weaners and mature pigs. Brutus can be fed as a liquid milk or mixed with dry-feed.

For best results feed Brutus in conjunction with pig meal, molasses or alternative pig supplements.

Due to its high protein and low-fat formula, Brutus is not designed to be fed to any animal species other than pigs and is not a piglet feed. Piglets should be reared with Anlamb to ensure adequate fat intake.



- Typical metabolic energy (ME) between 14-16 MJ/kg dry matter
- If feeding as a milk, mix with water at a rate of 200g/L

### TYPICAL ANALYSIS

Protein	31%
Fat	8%
Lactose	50%
Moisture	4%
Minerals	7%

### PRODUCT USAGE GUIDE

#### ADULT PIGS

Post weaning only

Brutus	●
Biosupport	●

## FEEDING PIGLETS WITH ANLAMB

**It is important piglets receive colostrum at birth. Colostrum should be available for at least 24 hours.**

If colostrum is not available from the sow, Jumpstart Full Cream Colostrum should be fed (Refer to p53)

### Feeding recommendations

To make one litre of mixed milk replacer, 150g of Anlamb is required. Add Anlamb to half of the required volume of water and mix thoroughly. Top up with water to the correct volume and ensure the temperature of the milk is approximately 38-40°C.

### Key recommendation

Feed Biosupport, NZAgbiz potent probiotic product, which contains one billion good bacteria per gram. Refer to p47 for further information.

## FEEDING FOALS WITH ANLAMB

**It is important that foals receive colostrum within four hours of birth.**

It is unlikely a foal will survive if it doesn't receive colostrum. If colostrum is not available from the mare, Jumpstart Full Cream Colostrum should be fed. (Refer to p56).

Ensure clean fresh water is available from day one, and from the first week high protein, high energy pellets should be offered.

### Feeding recommendations

To make one litre of mixed milk replacer, 100g of Anlamb is required. Add Anlamb to half of the required volume of water and mix thoroughly. Top up with water to the correct volume and ensure the temperature is approximately 38-40°C. Volumes may vary depending on the size and strength of the foal but DO NOT increase the concentration (100g/L). The tables on p56 are a guide only.

Feed requirements vary between 21% and 25% of bodyweight. If in doubt contact your vet.

From 21 weeks the amount of milk should be gradually reduced over a 3-week period. Ensure that the foal is strong and consuming adequate amounts of foal pellets and soft hay.



## FEEDING FAWNS WITH ANLAMB

Ensure that fawns receive colostrum at birth. Colostrum should be available for at least 24 hours, and longer if possible.

If hind colostrum is not available, fresh cow, goat or Jumpstart Full Cream Colostrum (Refer to p46) are suitable alternatives. Clean fresh water should be available at all times.

### Feeding recommendations

To make one litre of mixed milk replacer, 200g of Anlamb is required. Add Anlamb to half of the required volume of water and mix thoroughly. Top up with water to the correct volume and ensure the temperature is approximately 38-40°C. Always follow the feeding instructions – do not increase volumes or concentrations above recommended levels.

## FEEDING PUPPIES WITH ANLAMB

It is important that puppies receive colostrum within the first 12 hours of birth.

Ideally the puppies should receive colostrum from a bitch, but if this is not possible Jumpstart Full Cream Colostrum should be fed (Refer to p46).

### Feeding recommendations

To make one litre of mixed milk replacer, 200g of Anlamb is required. Add Anlamb to half of the required volume of water and mix thoroughly. Top up with water to the correct volume. Ensure the water has been pre-boiled and brought down to a suitable feeding temperature of 38-40°C before adding the Anlamb powder. Always follow the feeding instructions – do not increase volumes or concentrations above recommended levels. Puppies need to be fed by bottle and teat until their eyes are open. Puppies can then lap milk. When lapping begins, drinking water must be readily available to the puppies.

## FEEDING CRIA WITH ANLAMB

If bottle feeding from birth, it is important that colostrum is fed to cria (infant alpaca) within six hours of birth and then for at least two days.

If alpaca colostrum is not available then colostrum from deer, goats or cows may be used. Alternatively Jumpstart Full Cream Colostrum is available from your rural retailer (Refer to p46).

Research and information on feeding cria is not abundant in New Zealand. Feeding recommendations on p53 are a guideline only, as many rearers work on 'trial and error' with rates and concentrations. We would appreciate your feedback of experience with hand rearing cria. Phone us on 0800 809 011.

### Feeding recommendations

Unlike many other infant animals, cria stop feeding when full. It's best to offer them more than they are expected to drink.

To make one litre of mixed milk replacer, 200g of Anlamb is required. Add Anlamb to one third of the required volume of water and mix thoroughly. Top up with water to the correct volume and temperature.







# **ANIMAL HEALTH SUPPLEMENTS**

PRODUCT USAGE &  
BEST PRACTICES

## JUMPSTART

Jumpstart Full Cream Colostrum is a replacement colostrum powder designed as a natural supplement for new-born animals that have received little or no colostrum at birth. It provides essential immunoglobulins for new-born animals.



Immunoglobulins (IgG's) are the initial building blocks of health and immunity in ruminants. IgG's are antibodies that are essential to form the immune system of young animals.

- Contains required IgG antibodies for immune health
- Contains vital growth performance nutrients Vitamin A, E and Niacin
- Soluble, good mixability and curd
- Made from high protein casein and high fat cream powder
- Formulated as a complete first feed, meaning no mixing with milk is required
- Suitable for calves, lambs, goat kids, foals, fawns, puppies, piglets and cria

Mixing rate is 150g/litre warm water – approx. 38°C. Refer to the tables on pages 52-58 for specific infant animal feeding guidelines.

### TYPICAL ANALYSIS

Protein	42%
Fat	27%
Lactose	22%
Moisture	3%
Minerals	6%
IgG - via SPR method for live IgG	45mg/g

## BIOSUPPORT

Biosupport is a dairy based animal supplement that contains a powerful probiotic suspended in dry milk powder. It is suitable for calves, lambs, goat kids and piglets.

It contains a patented probiotic that can aid in enhancing the immune system and help promote the gut health of young animals.

Biosupport is suitable to add to liquid milk or milk replacer from new born age.

Being a powder, the good bacteria lie dormant until introduced to liquid, meaning no bacteria degradation.

- Contains patented Fonterra manufactured probiotic Bifidobacterium Animalis WO 99/10476
- Bacterial count of one billion good bacteria per gram
- Good solubility and flow properties
- 100% dairy milk powder
- Readily digestible
- 18-month shelf life

Mixing rate is 1g/litre of warm milk – approx. 38°C.



### TYPICAL ANALYSIS

Bifidobacterium Animalis	>10 <sup>9</sup> /g
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Excipient	Dairy Milk powder
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## NOVOLYTE

Novolyte is an electrolyte product containing sugars to help provide energy and a combination of essential salts to aid in the replacement of lost electrolytes.

It contains high grade ingredients in a dry powdered formulation that is soluble with good mixability.



### Novolyte can be used:

- To replace lost fluids due to scouring
- To treat dehydration or exhaustion after periods of stress such as transportation
- Novolyte not only rehydrates but has a lot of other good properties
- It restores energy, fluid and electrolyte levels and helps restore damaged gut cells
- Novolyte will provide energy and contains salts such as acetate & propionate to treat metabolic acidosis
- Novolyte also contains a combination of essential salts to help restore hydration and aid in the replacement of lost electrolytes
- Novolyte also contains salts that aid in water absorption, metabolise into energy, and do not interfere with stomach function

Mixing rate is 50g/L warm water – approx. 38°C.

Up to four doses per day. Refer to the table on p49 for specific infant animal feeding guidelines.

### TYPICAL ANALYSIS

Energy	70kJ/100ml
Total Sugar	70% w/w
Sodium	45mg/g
Chloride	53mg/100g
Potassium	16mg/g



# NOVOLYTE

Calves & lambs

## MIXING RATE - MODERATE CASES

SPECIES	Novolyte	Water	Doses Per 24hrs
<b>CALVES</b> (Average weight 40kgs)	100g	2L	2
<b>CALVES</b> (Average weight 50kgs)	150g	3L	2
<b>LAMBS</b>	10g	200mL	3-4

## MIXING RATE - MILD CASES

SPECIES	Novolyte	Water	Doses Per 24hrs
<b>CALVES</b> (Average weight 40kgs)	50g	1L	2
<b>CALVES</b> (Average weight 50kgs)	75g	1.5L	2
<b>LAMBS</b>	5g	100mL	2





**FEEDING  
GUIDES**

**CALF MILK REPLACER**

Calves

**TWICE A DAY FEEDING**

Mixing rate: 150g/L

AGE	Volume per feed*	Grams per feed	Grams per day
0-4 days	Colostrum or Jumpstart fed ad-lib		
5-10 days	2L	300g	600g
11-21 days	2.5L	375g	750g
22 days to weaning	3L	450g	900g

\*Add CMR to 1/2 the 'volume per feed' and mix thoroughly. Top up with water to correct volume and temperature.

**ONCE A DAY FEEDING**

Mixing rate 11-21 days old: 300g/L

Mixing rate 22 days old to weaning: 350g/L

AGE	Volume per feed*	Grams per feed	Grams per day
0-4 days	Colostrum or Jumpstart fed ad-lib		
5-10 days	Follow twice a day feeding guide above		
11-21 days	2L	600g	600g
22 days to weaning	2L	700g	700g

\*Add CMR to 1/2 the 'volume per feed' and mix thoroughly. Top up with water to correct volume and temperature.

# JUMPSTART

Calves



## TWICE A DAY FEEDING

Mixing rate: 150g/L

AGE	Volume per feed	Grams Jumpstart per feed
1 day	2L	300g

For days 2-4 Jumpstart should be fed in conjunction with a premium calf milk replacer or whole milk.

## TWICE A DAY FEEDING

Mixing rate: 150g/L

AGE	Volume per feed	Grams Jumpstart per feed	Grams milk replacer per feed
2-4 days	2L	150g	150g

### IMPORTANT POINTS WHEN FEEDING MILK REPLACER:

- For optimal results feed at 38-40°C
- Always use fresh clean water when mixing milk replacer
- Thoroughly clean mixing and feeding equipment after each feed
- Feeding recommendations are a guide only. Adjust volume to the weight and breed of the calf
- Do not overfeed and any changes made to feeding should be made gradually

## ANLAMB & JUMPSTART

Lambs, kid goats, fawn, cria & piglets

		LAMB 200g/L				GOAT KID 160g/L			
MIXING RATE	Age of Animal	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)
	1 day Jumpstart Colostrum	6	As per Jumpstart instructions			6	As per Jumpstart instructions		
	2-4 days	6	150mL	30g	0.9L	6	150mL	24g	0.9L
	5-7 days	4	250mL	50g	1.0L	4	250mL	40g	1.0L
	8-21 days	4	350mL	70g	1.4L	3	450mL	72g	1.4L
	Day 22 - weaning	3	350mL	70g	1.1L	2	500mL	80g	1.0L

MIXING RATE	FAWN				CRIA				PIGLET			
	200g/L				200g/L				150g/L			
Age of Animal	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)
1 day Jumpstart Colostrum	6	As per Jumpstart instructions			6	As per Jumpstart instructions			8	As per Jumpstart instructions		
2-4 days	6	150mL	30g	0.9L	6	150mL	30g	0.9L	8	25mL	4g	0.2L
5-7 days	5	200mL	40g	1.0L	4	250mL	50g	1.0L	6	40mL	6g	0.2L
8-21 days	4	350mL	70g	1.4L	3	300mL	60g	0.9L	4	80mL	12g	0.3L
Day 22 - weaning	3	600mL	120g	1.8L	3	350mL	70g	1.1L	4	100mL	15g	0.4L

### IMPORTANT POINTS WHEN FEEDING AN LAMB:

- Always use fresh clean water when mixing Anlamb
- Thoroughly clean mixing and feeding equipment after each feed
- Any changes to feeding should be made gradually
- Do not overfeed animals as this can contribute to bloat

## ANLAMB & JUMPSTART

Foals, kittens & puppies

		FOAL - HORSE				FOAL - PONY			
MIXING RATE		100g/L							
Age of Animal	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)	
Up to 2 weeks	12	900mL	90g	10.8L	12	700mL	70g	8.4L	
2-6 weeks	10	1200mL	120g	12.0L	10	1000mL	100g	10.0L	
6-12 weeks	8	1300mL	130g	10.4L	8	1100mL	110g	8.8L	
12-21 weeks	6	1500mL	150g	9.0L	6	1200mL	120g	7.2L	



MIXING RATE	KITTEN			PUPPY Miniature Breed			PUPPY Small Breed			PUPPY Medium Breed			PUPPY Large Breed			
	200g/L	160g/L	200g/L	200g/L	200g/L	200g/L	200g/L	200g/L	200g/L	200g/L	200g/L	200g/L	200g/L	200g/L	200g/L	
Age of Animal	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)	Feeds Per Day	Milk Per Feed (mL)	Grams Per Feed (g)	Daily Volume (L)
1-3 days Jumpstart Colostrum	10	As per Jumpstart™ instructions	As per Jumpstart™ instructions	As per Jumpstart™ instructions	10	As per Jumpstart™ instructions	As per Jumpstart™ instructions	As per Jumpstart™ instructions	10	As per Jumpstart™ instructions	As per Jumpstart™ instructions	As per Jumpstart™ instructions	10	As per Jumpstart™ instructions	As per Jumpstart™ instructions	As per Jumpstart™ instructions
4-7 days	10	2mL	0.4g	20mL	10	2mL	0.4g	20mL	10	3mL	0.6g	30mL	10	5mL	1.0g	50mL
1-2 weeks	10	4mL	0.8g	40mL	10	4mL	0.8g	40mL	10	5mL	1.0g	50mL	10	7mL	1.4g	70mL
2-4 weeks	6	8mL	1.6g	48mL	6	8mL	1.6g	48mL	6	10mL	2.0g	60mL	6	15mL	3.0g	90mL
4-8 weeks	4	15mL	3.0g	60mL	4	15mL	3.0g	60mL	4	20mL	4.0g	80mL	4	25mL	5.0g	100mL
8-12 weeks	3	35mL	7.0g	105mL	3	35mL	7.0g	105mL	3	45mL	9.0g	135mL	3	50mL	10.0g	150mL

### IMPORTANT POINTS WHEN FEEDING ANLAMB:

- Always use fresh clean water when mixing Anlamb
- Thoroughly clean mixing and feeding equipment after each feed
- Any changes to feeding should be made gradually
- Do not overfeed animals as this can contribute to bloat

## ANKID & JUMPSTART

### Goat kids

All feeding rates are based on average weights for newborn animals.

AGE	Feeds per day	Volume per feed	Grams per feed
1 day	6	Colostrum or Jumpstart as per instructions	
2-4 days	4	150 mL	26g
5-7 days	3	200 mL	35g
8-14 days	3	250 mL	43g
15-21 days	3	350 mL	62g
22 to weaning	2	475 mL	83g

## NOVOLYTE

### Calves

CONDITION	Average weight	Grams Per Feed (g)	Volume per feed (L)	Feeds per day
Mild	40kg	50g	1L	2-4 (max. 4L)
Mild	50kg	50g	1L	3-4 (max. 4L)
Moderate	40kg	50g	1L	4-5 (max. 6L)
Moderate	50kg	50g	1L	5-6 (max. 6L)

### Lambs

CONDITION	Average weight	Grams Per Feed (g)	Volume per feed (mL)	Feeds per day
Mild/Moderate	5kg	10g	200mL	2-5 (max. 1L)

120mL per 3kgs live weight per feed



## CONTACT US

For nutritional and technical advice or sales enquiries, talk to us today.

**NZAgbiz Customer Service Centre**

T: 0800 809 011

E: [nzagbiz@fonterra.com](mailto:nzagbiz@fonterra.com)



**NZAGBIZ**

**NZAGBIZ LIMITED | 0800 809 011 | NZAGBIZ.COM**

NZAgbiz Limited, PO Box 844, Hamilton 3240