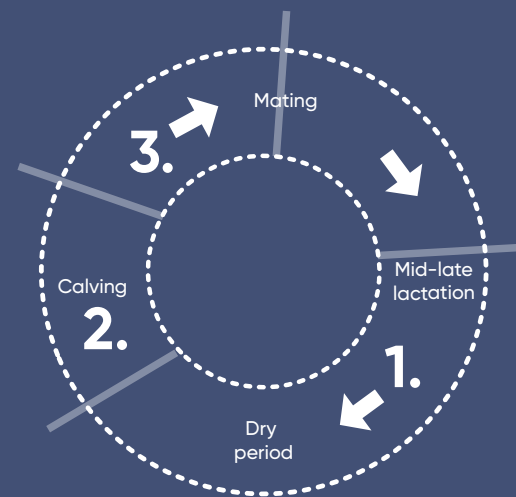


Cow management checklist

Are all the boxes ticked on this farm?



1. Mid-lactation to early dry period: Up to 3–4 weeks before calving

Tick Animals

Length of time cows are dry:

- Cows are dried off so as to have a minimum 6-week dry period (8 weeks preferred).
- Use early manual (rectal) pregnancy test with palpation and/or ultrasound probe before 14 weeks gestation to get accurate due-to-calve dates.

Mastitis risk management:

- Cows are given appropriate dry cow treatment at dry-off, including teat sealant after seeking vet advice.
- Check dry cows daily for the first 7 days after drying-off to ensure they have not developed mastitis.
- Heifers are given teat sealant 3 weeks before expected calving date if more than 5 cases of mastitis per 100 heifers in the first month in previous years.
- Provide safe, clean facilities for heifer handling and teat sealant administration.

Monitoring cows' nutritional status:

- Cows' body condition scores are monitored during late lactation and the dry period.
- Body condition score cows 8–10 weeks before drying-off and at drying-off (and again when entering the transition program).
 - Take action if more than 15% of cows <BCS 4.5, some or all cows are losing condition or there is a change in feed availability.
- Quick checks are used to identify any health and nutritional problems which may lead to body condition loss.

Disease prevention:

- Drench and vaccinate cows at dry-off
- Protect cows from gastrointestinal and skin parasites and clostridial diseases. Protection from fluke, biting insects and/or Salmonella may also be indicated.
- Drench and vaccinate heifers.

Monitoring dry herd/calving heifer herd:

- Herd is checked every 3–4 days to detect animals that may be starting to show signs of calving prior to their expected due date.

Tick Feed

Managing cows' body condition:

- Late lactation cows are fed in late lactation to achieve desired calving BCS at drying-off.
- If more than 15% cows < BCS 4.5 or more than 15% cows > BCS 5.5 at 8–10 weeks before drying-off, review feeding practices. If using a computerised bail feeding system, ensure settings help high genetic merit cows regain body condition.
- Dry cows are fed to maintain or gain body condition.
- Set up a feed plan for early dry cows. This may include allocating perennial pastures with possible fertiliser application to increase DM supply, utilising dry cows to follow milkers to control excessive pasture residues, or planting specialist grazing crops.
 - Test supplementary feeds for nutritional value.
 - If high-quality forages (> 9MJ ME/kg DM) are in limited supply or too expensive, consider feeding grain/concentrates to dry cows, ensuring all cows have equal access and appropriate risk management steps are taken to prevent ruminal acidosis.
 - Aim for a total of 100–120 MJ ME intake per cow per day, with realistic allowances for feed wastage given feed-out methods use.
 - Consider separating thin cows (< BCS 4.5) at dry off and feeding them preferentially.
 - Feed fat cows (> BCS 5.5) to maintain condition during dry period.
 - If > 5% of cows are dried off too fat (> BCS 5.5), review reproductive management practices and mid-late lactation diets.

Tick Facilities**Feeding facilities and equipment:**

- Troughs/self feeders are available for feeding early dry cows grain/concentrates if necessary.
- Dry cow paddocks have adequate pasture cover and quality.
- Cows have access to adequate shade and fresh, cool drinking water at all times.
 - Restrict access to dams/drains.
 - If paddocks used for milking and dry cows in hot weather provide inadequate shade from trees, seek alternatives.

Tick People**Roles and responsibilities/work routines/training:**

- Written standard operating procedures have been prepared for farm team and are being complied with
 - Remember the 'keep it simple' rule and be clear on assigning responsibility for key tasks.
- Farm team members who have new roles, responsibilities and work routines have had the necessary training.
 - Consider running in-house training sessions with help from an adviser.

2. Transition period: Last 3-4 weeks pre-calving

Tick Animals**Length of time on springer diet:**

- Cows and heifers are fed springer diet for at least 21 days (Avoid feeding for more than 35 days).
 - Use early manual (rectal) pregnancy test with palpation and/or ultrasound probe before 14 weeks gestation to get accurate due-to-calve dates. This will maximise the number of cows which enter the springer herd and achieve at least 21 days on the springer diet.

Heifers:

- Heifers are early manual (rectal) pregnancy tested to get accurate due-to-calve dates.
- Heifers are put in with the springer cows for 21-28 days to help them adapt their rumens, get extra minerals and socialise with older animals (Alternatively, mix heifers with far-off dry cows to reduce stress of doing so in their last 3-4 weeks of pregnancy).
 - If springers are fed in the dairy, also run the heifers through the dairy. This gets them used to the dairy and helps harden their feet.

Group size:

- Cows are grouped to control dominant behaviour and help ensure all cows have access to enough feed
 - Match group size with feeding facilities.
 - Ensure feed managers are reviewing group size regularly.

Tick Feed**Sourcing feed ingredients:**

- All forages are suitable for springer diet.
 - Test for DM, ME, CP, NDF, Ca, Mg, P, K, DCAD, before buying, ensuring wet chemistry method is used for mineral analysis, not NIR.
 - Assess visually for signs of moulds or spoilage – test if concerned.
 - Avoid legume and brassica forages.
- Fodder purchases are planned in advance
 - Purchase or assign a single consignment of suitable tested hay/silage from one source and dedicate it to springers.
 - Consider testing pastures if to be included in springer diet and fed at >2 kg DM/cow/day – especially for DCAD.

Springer diet:

- Diet includes all nutritional components required for a well integrated springer diet, but is not over-complicated.
 - Role of pasture in springer diet has been determined.
 - Realistic allowances have been made for wastage during feed-out.

- 100-120 MJ ME/day (large cows may require up to 140 MJ ME/day) with energy density of approx. 11 MJ ME/Kg DM.
- >36% NDF DM.
- 14-16% crude protein DM.
- Ca <0.6% DM.
- Mg >0.45% DM.
- P <0.4% DM.

- K < 2% DM.
- DCAD <80 mEq/kg DM (ideally zero).
- Micro minerals – as reco'd.
- Rumen modifier – use same as in milker diet.
- Low DCAD buffers only (do not use sodium bicarbonate).

- Lead feed product used in springer diet is nutritionally sound and used as intended
 - Consider whether to us professional formulation or attempt to DIY.
 - Consider which form of lead feed to use – pellet, grain mix, loose mix or liquid supplement. Use same form before and after calving, e.g. grain mix, pellets.
 - Check that DCAD potency is appropriate for reco. per cow feeding rate and accounts for forage mineral composition
 - Adjust lead feed product's feeding level and/or formulation to account for variation in forage ME and CP levels.
 - Consider including rumen modifiers to help prevent acidosis (if at risk) and ketosis.

Tick Animals**Mastitis risk management:**

- Cows' teats are sprayed if feeding in the dairy.
- Any cows or heifers that develop marked udder oedema or begin dripping milk are milked
 - Ensure that calves from these cows receive colostrum from another cow or stored colostrums
 - Milk cows within 12 hours of calving.
- Flies are controlled.

Tick Facilities**Springer paddock/feedpad:**

- Springer paddock/feedpad configuration.
 - Consider whether to use a springer paddock which includes hay feeders +/- lead feed troughs, or a separate springer paddock with a simple feedpad adjacent to it.
 - Ensure springer paddock/feedpad are an adequate size for number of cows using them at peak times.
 - If lead feeding in dairy, ensure springer paddock/feedpad is close by.
 - Ensure fencing is adequate to keep springers and calves out of nearby waterways.
 - Ensure access to nearby cattle crush.
 - Provide adequate access to fresh, clean water and adequate shade to reduce heat stress risk.

Mastitis risk management:

- Springer paddock/feedpad are clean and dry.
 - ANY reduction in exposure to fresh dung pats reduces mastitis risk.
 - Prepare well compacted, sloped surfaces for feeding area/feedpad.
 - Ensure water troughs do not leak and have well compacted, sloped surfaces around them for cows to stand on when drinking.
 - Manage soiling/manure loading with regular scraping.
 - or change in bedding materials.
 - Move hay feeders regularly to minimize soiling in teat-zone.
 - Rotate cows regularly through 2–3 springer paddocks.

Tick Feed**Feeding out times:**

- Timing of feeding each day is regular and cows have 8 hours access per day.
 - If you lead feed springers in late afternoon, they are more likely to calve in daytime.

Access to pasture:

- Cows' access to pasture is carefully restricted to less than 2 kg dry matter per day to minimise milk fever risk. If restriction is difficult to control, do not feed.
 - Ensure pasture cover in springer paddock is enough to assist hygiene but not too much. Strip graze as necessary.
 - Do not graze effluent or potassium fertilised pastures (Most paddocks where cows are calved are close to the dairy – these will nearly always be very high in potassium due to years of effluent deposition).
 - Review allocation based on change in herd size – especially later in calving period as group size declines.

Drinking water:

- Stock water supply is easily accessed, cool and fresh, with pH close to neutral.
 - If considering using bore water, check for pH, total dissolved salts and hardness.
 - If supplying MgCl in water, use dispenser to control dilution and check daily cow consumption.
 - Ensure flow capacity and access is adequate for peak cow numbers.

Tick People**Roles and responsibilities/work routines/training:**

- Written standard operating procedures have been prepared and are being complied with by farm team.
 - Remember the 'keep it simple' rule.
 - Assign roles and responsibilities.
- Farm team members who have new roles, responsibilities and work routines understand the benefits of good transition management and have the necessary training.
 - Have a farm team meeting to discuss.
 - Consider a training course.

Occupational health and safety:

- Staff have identified and minimised the risks to cows and people.
- Staff know what to do if something goes wrong.
- Handling facilities are clean and well maintained.
- Cattle crush is functional and well lit.
- All staff have adhered to an appropriate Q-fever prevention program.

Tick Facilities**Feeding facilities and equipment:**

- Cows have equal and free access to springer diet.
If lead feeding in dairy:
 - Ensure feeding system is well calibrated and delivering a consistent quantity of grain/lead feed per bail.
 - If using a herringbone, check that an even quantity of feed is dropped along all bails on each side (individual bales are preferred to a continuous trough).
 - Set rotary speed to allow full consumption of diet.
- If lead feeding in springer paddock:*
 - Do not feed lead feed on ground, use troughs. Provide adequate trough space per cow (1 metre per cow is optimal if feeding out lead feed in troughs or if a springer PMR is fed without head locks).
 - If using hay feeders, provide one per 20 cows and minimise waste.
- Feeding infrastructure and equipment save labour.
 - If on-farm logistics and cashflow permit, buy, store and handle lead feed in bulk versus bags.
 - Consider a dedicated lead feed silo.
 - If lead feeding in the dairy, consider installing an extra feeding system (if herringbone dairy) or feed head (if rotary dairy).
 - If feeding in the paddock, use a front end loader, a feed hopper with auger on a trailer, or a mixer wagon to put out lead feed/PMR in troughs.
 - Use troughs which are easy to clean and move if non-permanent.
 - Consider using a TMR to combine all ingredients and reduce selection – especially if milker herd is fed a PMR or TMR.

Tick People**Monitoring cow health and performance:**

- Cows' body condition scores are recorded as they enter the transition program.
- The transition cow management program is regularly monitored for effectiveness and efficiency
 - Ensure each individual cow is receiving and consuming its springer diet.
 - Record all cow health problem events and treatments around calving.

Health problem	Target	Seek help if
Milk fever	1% (old cows > 8yrs: 2%)	>3%
Clinical ketosis	<1%	>2%
Abomasal displacements	<1%	>2%
Mastitis	<5 cases/100 cows/first 30 days	>5 cases/100 cows/first 30 days
Lameness	<2% with > Score 2 out of 5	>4% with > Score 2 out of 5
Grass Tetany	0%	1 case
RFM (>24 hrs after calving)	<4%	>6%
Vaginal discharge after 14 days	<3%	>10%
Assisted calving	<2%	>3%
Lactic acidosis	0%	1%

* Based on the following data sets: Morton, Curtis, Beckett, Moss, Stevenson.

- Review disease data regularly and develop an action plan to identify failure point(s) and prevent next time.

3. First 100 days in milk

Tick Animals

Fresh cow management:

- Fresh cows are given special attention.
 - Ensure fresh cows always have access to high quality feed, fresh fodder.
 - Consider the feasibility of running a separate fresh cow herd for cows up to 30 DIM.
 - Utilise in-parlour computerised feeding system to step up fresh cows' concentrate intake gradually to peak intake over two to three weeks.
 - Consider the impact of long walking distances on fresh cows. If dairy has an auto draft system, consider using it to send fresh cows to paddock with herd only once a day after milking, holding them near the dairy after the other milking to reduce walking and reduce forage competition.
 - Consider feeding fresh cows a TMR instead of grazing and supplements.

Monitoring cow health and nutritional status:

- Quick checks are used to identify any health and nutritional problems which may lead to excessive body condition loss between calving and mating.
 - Check grain/concentrate left in bails, refusals at feed bunker/trough and pasture residuals.
 - Check milk yield and composition (protein and fat percentages) of individual cows – monitor daily if technology permits.
 - Check each cow's general demeanour, feeding behaviour, cud chewing, rumen fill, udder fill, manure consistency, locomotion, and, for at least the first three days post calving, rectal temperature. Look at variability across the herd as well as averages
 - Develop and implement protocols for identifying sick cows and rapid diagnosis and treatment of health problems.

Mastitis risk management:

- Cows are milked within 12 hours of calving.
- All quarters are milked out for the first eight milkings, using good technique and a consistent routine, focussing on udder preparation and teat dipping.
- Clinical mastitis cases are identified and treated early as per farm SOP.
- Fresh cows are handled quietly and not rushed during moving and milking.
- Udder oedema cases are promptly addressed.
- Fresh cow paddock (if used) is clean and free of manure and mud.
- Water troughs are leak free with no mud.
- Feed racks/troughs are clean and mud free.

Tick Feed

Fresh cow diet:

- Only high quality, most palatable forages that have adequate NDF and physically effective fibre are used.
- More moderately fermenting starch source (e.g. maize grain) is fed instead of rapidly fermenting grains (i.e. wheat/barley to increase DMI and milk yield).
- 1-2 kg/cow/day of a high-quality protein source (e.g. canola meal is fed to increase MP and AA supply).
- Diet formulation.
 - 3% body weight of DM allocated (approx. 11.5-12 MJ ME/Kg DM).
 - >32% NDF DM (>35% NDF DM is recommended in very fresh cows if forage is fed separately and/or physically effective NDF level is low i.e. <22%)
 - 16-19% crude protein DM.
 - DCAD >250 mEq/kg DM.
 - Ca: 0.8-1.0% DM, P: 0.4% DM, Mg: 0.3% DM.
 - Micro minerals – as recommended.
 - Rumen modifier – use same as in springer diet, introduce mineral buffers if in lactating cow diet – ensure therapeutic doses from day one are supplied.

Early Lactation diet:

- Wheat/barley +/- corn grain are fed.
- 1-2 kg/cow/day of a high-quality protein source (e.g. canola meal is fed to increase MP and AA supply).
- Individualised concentrate feeding strategy is considered if pasture allowance is restricted to support those cows on herd with a relative nutrient deficit, such as cows in first 40-80 DIM, cows of high genetic merit, cows lower in herd's social hierarchy, cows late in milking order.
 - Determine which cow and system-level parameter(s) that concentrate feeding allocation will be based on, and how data for these parameters will be collected and entered into the herd management system.



Tick Facilities

Feeding facilities and equipment:

- Cows have equal and free access to diet:
 - Provide adequate trough/bunk space and number of hay feeders for fresh herd.
 - Install collars/ID system.
 - Install/utilise auto-drafting system for managing fresh cows.
 - Install/utilise in-parlour computerised feeding system to support cows with relative nutrient deficit.
 - Provide mud-free access to clean drinking water.

Mastitis risk management:

- Calving area/facilities are clean and dry:
 - Consider a separate 'close-up calving paddock' (possibly with shelter from heat, wind and rain) for cows in last two to four days before calving.

Heat stress risk management:

- During periods of hot weather, cows are managed to reduce risk of heat stress:
 - Provide access to adequate shady areas.
 - Delay afternoon milking time.
 - Provide evaporative cooling in dairy holding yard during milkings.
 - Ensure free access to fresh, cool drinking water.

Feeding management:

- Forage feeding of fresh cows is carefully managed
 - Provide fresh feed two to three times per day regardless of feeding system.
 - Do not overfill feed troughs and hay racks.
 - Dispose of rejected/rain spoiled feed daily.
- If cows were not fed pasture during pre-calving transition period, it is introduced rapidly but in stages.
- Concentrate feeding rate of each freshly calved cow is ramped up gradually over first five to seven days post-calving to reach target peak level by day 14–21.
 - Consider installing a computerised feeding system which enables variable levels to be fed to individual cows.
- In PMR systems, grain is divided between dairy and PMR.
- Develop feeding systems and rations that deliver full mineral and additive rates from day one.
 - Consider supplementing with additional calcium if base calcium supply cannot be adjusted separately to other components of concentrate using computerised feeding system.

Feed supplements/additives:

- Inclusion of nutritional supplements/additives in diet is considered if deemed to be beneficial and cost-effective:
 - Choline.
 - Lysine, Methionine, other AA.
 - Chromium.
 - Bypass fat.
 - Live yeast and yeast-based products.
 - Organic minerals.
 - Phytochemicals/phytoextracts.
 - Betaine.

Tick People

Roles and responsibilities/work routines/training:

- Written standard operating procedures have been prepared for farm team and are being complied with:
 - Remember the 'keep it simple' rule.
- Farm team members who have new roles, responsibilities and work routines have had the necessary training:
 - Assign roles and responsibilities.
 - Consider a training course on cows' signs.

Monitoring cow health and nutritional status:

- Cows' body condition scores are recorded as they enter the transition program.
- The calving/fresh cow management program is regularly monitored for effectiveness and efficiency:
 - Check fresh cows two to three times daily for signs of disease (e.g. RFM, vaginal discharge, milk fever, mastitis).
 - Record all cow health problem events and treatments around calving.
 - Treatments should follow SOPs.
 - If running a separate fresh herd, set guidelines for when fresh cows go into the main milking herd.

Disclaimer

The content of this publication is provided for general information only and has not been prepared to address your specific circumstances. We do not guarantee the completeness, accuracy or timeliness of the information.

Acknowledgement

Dairy Australia acknowledges the funding from levy payers and contribution by Commonwealth Government.
© Dairy Australia Limited 2025. All rights reserved.

Dairy Australia
1800 004 377
enquiries@dairyaustralia.com.au
dairyaustralia.com.au