

A head start on results

Bovatec®. For increased liveweight gains in calves and heifers



BOVATEC®

ZOETIS LEADING INNOVATION IN ANIMAL HEALTH **FOR OVER 75 YEARS**

An investment in your future

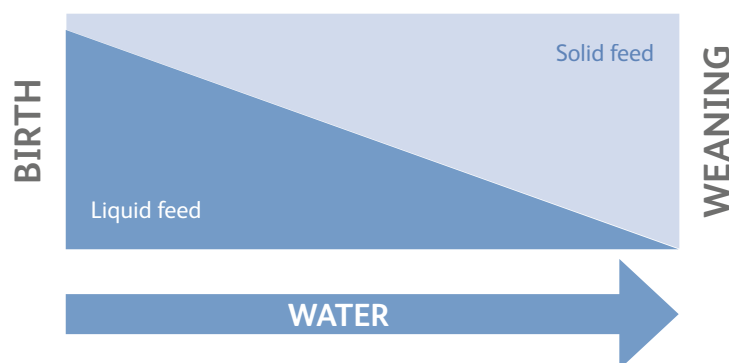
Healthy calves are essential to your future profitability and success. Investing in their health and wellbeing at the start pays dividends with high quality replacement heifers. To give your herd a head start in life there are two key nutritional goals:

1. Take advantage of calves' capacity to grow:

- Ensure the calf receives 10% of its body weight as colostrum within 6 hours and no later than 24 hours after birth (typically 4 litres for Friesians and 3 litres for smaller breeds).
- Provide access to clean fresh grain or grain-based concentrate from day one (minimum specifications 18% CP and 11 MJ ME/kg on **an as fed basis**).
- Provide access to clean 'long fibre' (at least 1–2 cm) from day 3.
- Provide access to fresh, clean water and clean, dry, draught free housing to minimise disease challenge.
- Regularly monitor growth rates. Aim for fully weaned calves to weigh 90–100 kg at 12 weeks of age.¹

2. Ensure a well developed rumen for effective weaning

- Provide clean straw to help develop rumen muscles and quality pellets or grain-based concentrate to stimulate volatile fatty acid production which promotes rumen papillae growth and development.^{1,2}
- Feed milk only once a day to encourage faster rumen development.¹



Adapted from Rearing Healthy Calves, Dairy Australia Manual³

The cost of coccidiosis

Calves are particularly vulnerable to the disease coccidiosis. Caused by the protozoans *Eimeria zuernii* or *Eimeria bovis*, coccidiosis can impair performance and prevent calves from weaning at their optimum age and weight. If left untreated it can escalate from watery faeces and reduced growth to bloody scours and even death.

Bovatec®. A head start for calves

Bovatec® has been shown to control the clinical signs of coccidiosis and reduce faecal shedding of *E. zuernii* and *E. bovis*.⁴ When coccidiosis is controlled, calves are more likely to reach their full potential.

Bovatec® fits in with recommended calf-rearing programs. Its formulations are designed to meet your calves' needs at each life stage:

- **Bovatec®** is added to leading fortified calf milk additives or calf milk replacers to prevent coccidiosis, making it ideal for pre weaned calves.
- **Bovatec® 20CC** is mixed with calf and heifer pellets to reduce the risk of coccidiosis, promote growth, liveweight gain and feed conversion in calves.
- To ensure that the effective dose rate of at least 1mg/kg BW/day is achieved Bovatec® should be included in both the calf milk and calf starter pellet diets.

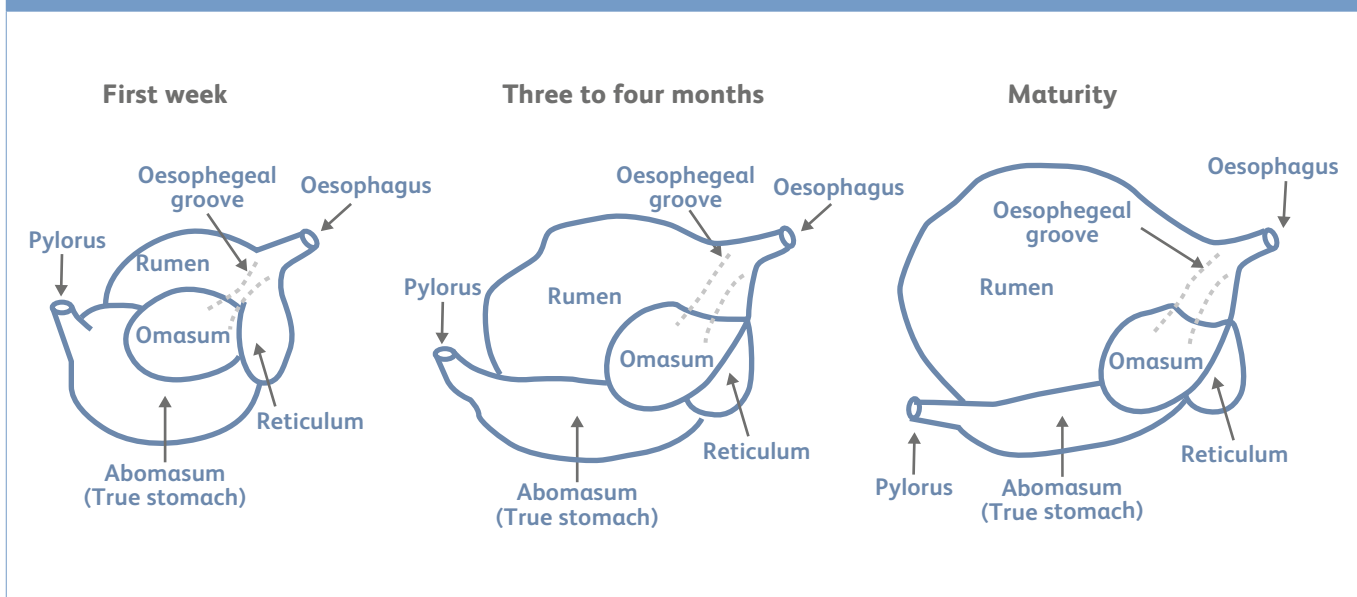
Bovatec® also has a 2–5 times greater safety margin in calves than monensin,⁵ giving you greater peace of mind.



Rumen and growth

Rumen development is vital for healthy growth in calves and heifers. If calves are weaned before their rumen is sufficiently developed, performance setbacks occur. The right combination of roughage, fed in combination with a quality concentrate containing Bovatec,[®] promotes the rumen development you require for success.

The developing rumen



Note the changes that occur as the animal moves from deriving nutrients from milk to solid feed.
Source: John Moran



Bovatec®. For healthier heifers

Your future herd performance depends on feeding your heifers an adequate quality pasture or ration to build the right frame and prepare them for lactation. Bovatec® can help maximise feed conversion from the feed you have and contribute to efficiently achieving target growth rates in your heifers.

The application of Bovatec® to grazing cattle that are hand fed, or have access to free-choice supplements, has been intensively investigated. In 15 field studies when Bovatec® was incorporated in the grain supplement, cattle achieved significantly increased average daily growth rates, compared to cattle that didn't receive Bovatec.®⁶

FDA 2001 – Efficacy of Bovatec® in hand fed supplements for pasture cattle

Bovatec® (lasalocid Dose) (Mg/head/day)	Treatment Mean of ADG (kg/d)	Improvement over control
0	0.57	–
50	0.58	1.75%
100	0.60	5.26%
200	0.64	12.28%
300	0.65	14.04%

Avcare Literature Review, The role of enteric antibiotics in livestock production, May 2003.

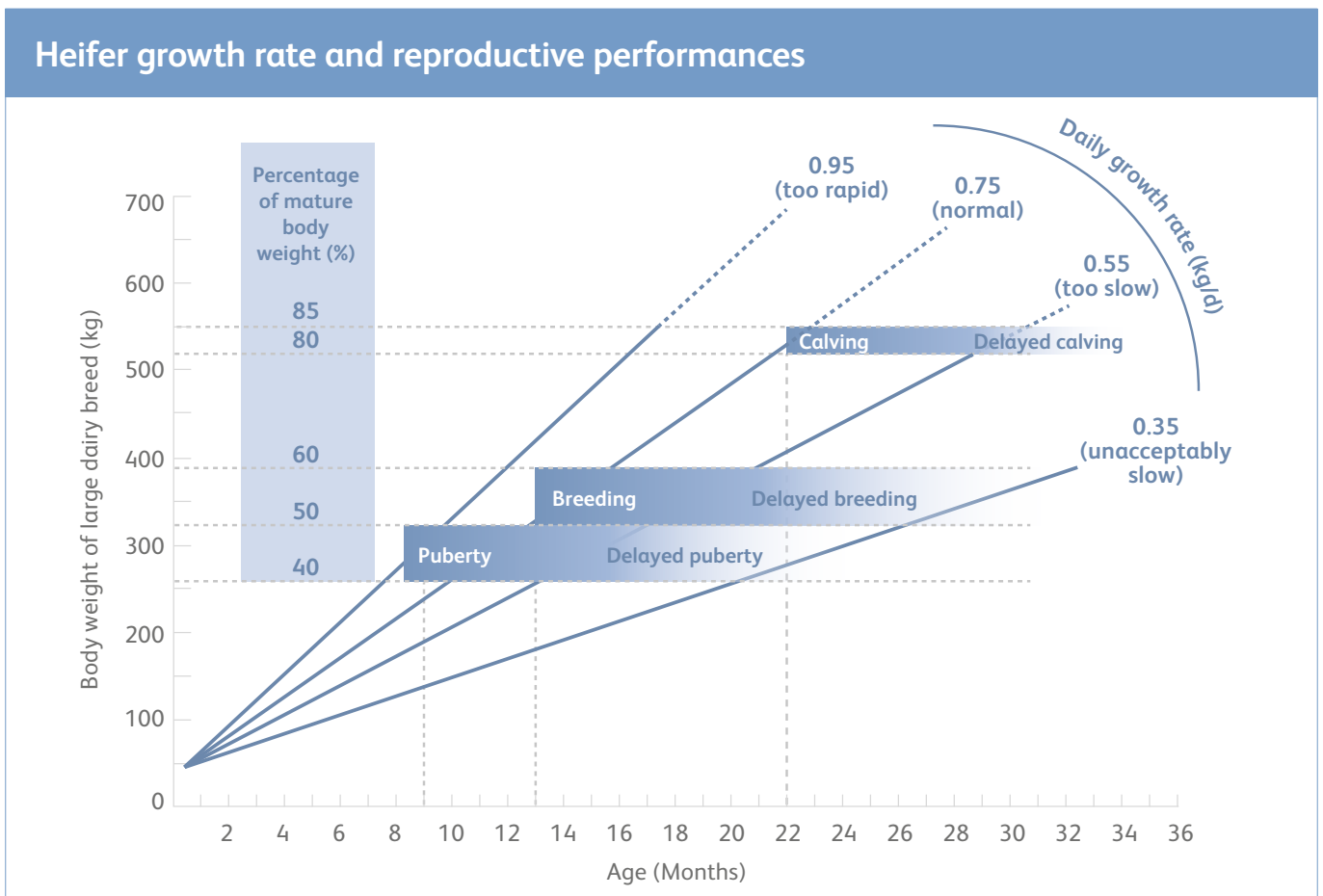


Predicting the future

Good heifer management protects both the health and profitability of your herd. Growth rates early in life impact on an animal's future performance. Reproductive success can be optimised, with heifers conceiving and calving earlier when target growth rates are met. The impacts on profitability include:

- Increase in first lactation milk production
- Increase in lifetime milk production
- Less culling due to failure to conceive or poor production
- Fewer replacement heifers required
- Genetic potential maximised⁷

A wither height measuring device such as the Bovastick™ can be a useful tool in monitoring your replacement heifer growth targets.



Adapted from Wattiaux M

Bovatec®

Results right from the start

- Controls the clinical signs of coccidiosis and reduces faecal shedding caused by *E. bovis* and *E. zuernii* in growing cattle.
- Improves liveweight gain and feed conversion efficiency in growing cattle in both pasture based and TMR systems.
- Using Bovatec® 20CC in calf and heifer feeds drives consumption and growth. Calves have been shown to eat significantly more of a ration containing Bovatec® than sodium monensin.⁸

The Bovatec® Range. Freedom of choice



Bovatec® 20 CC

Lasalocid sodium feed additive premix 200 g/kg (S6)
– 20 kg multi walled paper bags



Bovatec® Liquid

Lasalocid sodium liquid suspension 200 g/L (S6)
– 23.5 L Plastic Drum and 900 L Tote Bin



Avatec®/Bovatec® Technical

Lasalocid sodium oral powder premix 900 g/kg (S6)
– 50 kg and 25 kg cardboard fibre keg

Well managed heifers that weigh 100 kg more at 2 years are likely to produce 2,500 L more milk over their lifetimes.⁷

Calf and Heifer usage guide:

Pre-Weaned Calves

For coccidiosis control, include fortified milk replacers or additives which are built with Bovatec® in your calf management program.

Use a dose to provide greater than or equal to 1 mg/kg body weight of the active lasalocid sodium.

Calf Pellets and Concentrate

As calves transition onto pellets Bovatec® 20CC may be included to control clinical signs of coccidiosis and improve liveweight gain and feed conversion.

Add 165 grams of Bovatec® 20CC in 1 tonne complete feed (dry matter basis)

Heifer Concentrate

For improved liveweight gains and feed conversion efficiency mix 165 grams of Bovatec® 20CC premix per 1 tonne of **total mixed ration** (dry matter basis).

In supplements for **hand feeding pasture cattle** feed 1 gram of Bovatec® 20CC per head per day in a minimum of 0.5 kg of medicated supplement.

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For further information contact Zoetis technical services on **1800 814 883**

References: **1.** Moran J. (2002) Calf Rearing, A Practical Guide. Orange, NSW: Primary Industries, Agriculture. **2.** Heinrichs AJ. (2005). Rumen Development in the Dairy Calf. *Advances in Dairy Technology*, 17:179-187. **3.** Halliday I & Basham D (2011). Rearing Healthy Calves. Chapter 5 Good Nutrition. Dairy Australia. Retrieved from: <http://www.dairyaustralia.com.au/Animals-feed-and-environment/Animal-welfare/Calf-welfare/Rearing-healthy-calves-manual.aspx> **4.** Heinrichs AJ & Bush GJ. (1991). Our Industry Today. Evaluation of Decoquinatone or Lasalocid Against Coccidiosis from Natural Exposure in Neonatal Dairy Calves. *Journal of Dairy Science*. 74(9): 3223-3227. **5.** Blanchard PC *et al*, (1993). *Lasalocid toxicosis in dairy calves*. *J Vet Diagn Invest* 5:300-302. **6.** Stephen Page (2003). The role of enteric antibiotics in livestock production. A review of published literature prepared for Avcare. Canberra ACT: Avcare Advanced Veterinary Therapeutics. **7.** Johnston R *et al*. (1997) *Dairylink - Growing Heifers*. Gloucester, NSW: NSW Agriculture. Retrieved from: http://www.dpi.nsw.gov.au/___data/assets/pdf_file/0020/162353/growing-heifers-full.pdf **8.** Nussio *et al* (2002). *Decoquinatone, lasalocid and monensin for starter feeds and the performance of holstein calves to 20 weeks of age*. *Scientia Agricola*. 59(3):421-426. Bovastick is a Trademark of Zoetis Australia.