Calf Rearing Supplement Comparison

ANIMAL HEALTH

PRODUCT	PROCALF	OUEEN OF CALVES	CALF BREW	DANCALF PLUS	CALF - ENZYME FEED ADDITIVE	BIOSUPPORT
MANUFACTURER'S DESCRIPTION	A probiotic extract with selected live microbes licensed from AgResearch designed to enhance gut condition of calves during development of the rumen. (See over for more information).	A dual nutrition program that boosts immune function and creates a stronger curd that slows the transit of milk through the intestinal tract. (See over for more information).	The latest addition to the BioBrew range of fresh probiotic products is CalfBrew, the finest microbial tool available, designed to bring your calves through their first year in their best condition at a truly affordable price.	A premium calf food supplement designed to give calves the best start in life. Containing vitamins, minerals, coccidiostat, probiotic and prebiotic.	BioStart Calf is a prebiotic, digestive-enhancer that has been specially developed and formulated for calves. BioStart Calf was developed in New Zealand and has been sold for 25 years.	Biosupport [™] is a powerful probiotic supplement for young animals developed and produced by NZAgbiz and Fonterra Research & Development Centre.
INDEPENDENTLY TRIALED AND PROVEN	Yes	Yes	Yes	None identified*	None identified*	None identified*
AGRESEARCH MICROBES	Yes	None identified*	None identified*	None identified*	None identified*	None identified*
ADDED RENNET	Yes	No	No	No	Yes	No
MICROBE/ GOOD BACTERIA COUNT INFORMATION AVALIBLE	Yes Quantity not stated Please refer to back	N/A Non-microbial product	Yes Over 10 billion/5L	Yes Quantity not stated	Yes Quantity not stated	Yes 4 billion/feed
ABILITY TO WEAN EARLY	Yes Up to 7 days	None identified*	None identified*	None identified*	None identified*	None identified*
COST/CALF/DAY	\$0.18	\$3.12	\$0.12	\$0.35	\$0.17	\$0.16
TOTAL COST FROM BIRTH TO WEANING (\$/HEAD)	\$7.68**	\$82.85**	\$6.02**	\$17.31**	\$8.47**	\$7.84**
SIZES AVALIBLE	10L 1L, 5L, 20L, 100L	20kg	10L 1.25L, 5L, 20L	6kg	5L 1L, 2L, 10L	5kg
DOSE RATE	5mL/head initial dose followed by 2mL/head/ day.	25g - 50g/L of colostrum or milk. Dose dependent on age of calf.	10mL/head for first week then 5ml/head/day.	4g/head/day. Increase to 6g daily until up to 120kg live weight.	2mL/head/day in milk or milk replacer.	1g/L of colostrum or milk.
MORE INFOMATION	www.donaghys.co.nz	www.queenofcalves.org	www.biobrew.net.nz	www.nutritech.co.nz	www.biostart.co.nz	www.nzagbiz.co.nz

*Unable to find any information online using the provided links to; independently trialed with scientifically proven results, use of AgResearch microbes, ability to wean early. ** Size in bold has been used in comparison. All pricing is GST inclusive. This document has been produced by Donaghys on 20 April 2023 - Please see www.procalf.co.nz

QUEEN OF CALVES FURTHER INFORMATION:

There are two Queen of Calves products. Queen of Calves™ STARTER is part I of the 'The Queen of Calves Nutrition Programme™' and it contains a number of selected beneficial bacterium (probiotic), prebiotic, plant extracts and essential amino acids to boost immune function.

Part II is Queen of Calves FINISHER; it contains several marine plant species selected for specific attributes, and land plants, essential amino acids, beneficial bacterium, prebiotic and vitamins, that when added to milk creates a stronger curd and slows the transit of milk through the intestinal tract.

Technical Information – Probiotic Extracts

PROBIOTIC EXTRACTS

Donaghys probiotic extracts are microbiological preparations designed to promote beneficial rumen microbes and to stabilise gut conditions.

They also contain amino acids and vitamins which promote efficient microbe function. The probiotic extract cultures create a range of natural gut modifying substances and buffers, targeting improved gut wall condition and stabilized pH in the rumen.

Donaghys probiotic extracts are different to a typical common probiotic as they go through a final stage of processing called "cell-fragmentation".

This process is unique to Donaghys and has resulted in a range of products that have been scientifically proven to increase performance on ruminant livestock.

The technology also allows Donaghys probiotic extracts to have a longer shelf life compared with simpler probiotics as it does not rely on having a large number of live bacteria to aid in animal performance.

For more information on Donaghys Probiotic extracts please refer to: www.donaghys.com/dairy/products/animal-health/ probiotic-extract

MICROBE/ GOOD BACTERIA COUNT INFORMATION

The strength of ProCalf is in the non-live component produced during the cell-fragmentation process.

Before cell-fragmentation the product contains billions of bacteria per mL but this is deliberately reduced to produce a shelf stable and scientifically proven product.

It is not a matter of how many bacteria are present but what effect the product has on the animals as some products focus on solely inoculating the gut.

One reason to have some live bacteria is if those bacteria are significantly better than others at undertaking a particular role. Donaghys have added live AgResearch strains as they have been identified as adhering to and increasing the integrity of the gut wall.

ProCalf has two advantages - a proven probiotic extract technology that is highly effective and two well researched AgResearch strains that are proven to populate the gut wall which in turn safe guards its integrity.

RENNET

The rennet enzyme preparation in ProCalf helps to naturally clot the milk to slow passage through the Abomasum allowing more time for digestion.

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The rennet also breaks down molecules in milk to make digestion easier in the gut. The premium rennet used in ProCalf is similar to the rennet produced naturally in calves and is better than rennet taken from plants.

External factors such as stress, weather, medication or poor health can cause calves to under produce rennet.

Providing the right rennet at the right time helps to reduce dietary scours in calves.

AGRESEARCH MICROBES

Patented AgResearch microbes were added to the original ProCalf product in 2009 based on trial results at AgResearch Grasslands research facility in Palmerston North.

The addition of the AgResearch microbes resulted in treated animals showing greater and more rapid weight gain, increased feed intake and earlier maturity than the untreated calves.

