ROYAL DE HEUS

Since 1911, from the grain mill in Barneveld the Netherlands, Royal De Heus has grown into an international leading producer and exporter of a complete range of feeds, concentrates, premixes and specialties. Nowadays De Heus Animal Nutrition is a global top-15 feed supplier with over 4,200 employees, represented in 70 countries.

Our unique approach aim to help farmers in all aspects of farm management and increase the health, longevity, milk production of their animals as well as the earnings of our farmers. By collecting, sharing, translating and applying all knowledge and experience we daily obtain worldwide we are able to provide tailored nutritional strategies, products and services wherever we are active. Our global dairy specialists travel the world focusing on improving all aspects of farm management by developing and training our local teams as well as farmers.

In our production location in Rajpura, Punjab we produce products specifically catered to the demands of the Indian dairy cow and buffalo. In these products we combine our global knowledge and local experience and use this to develop tailored solutions to improve the Indian dairy sector.



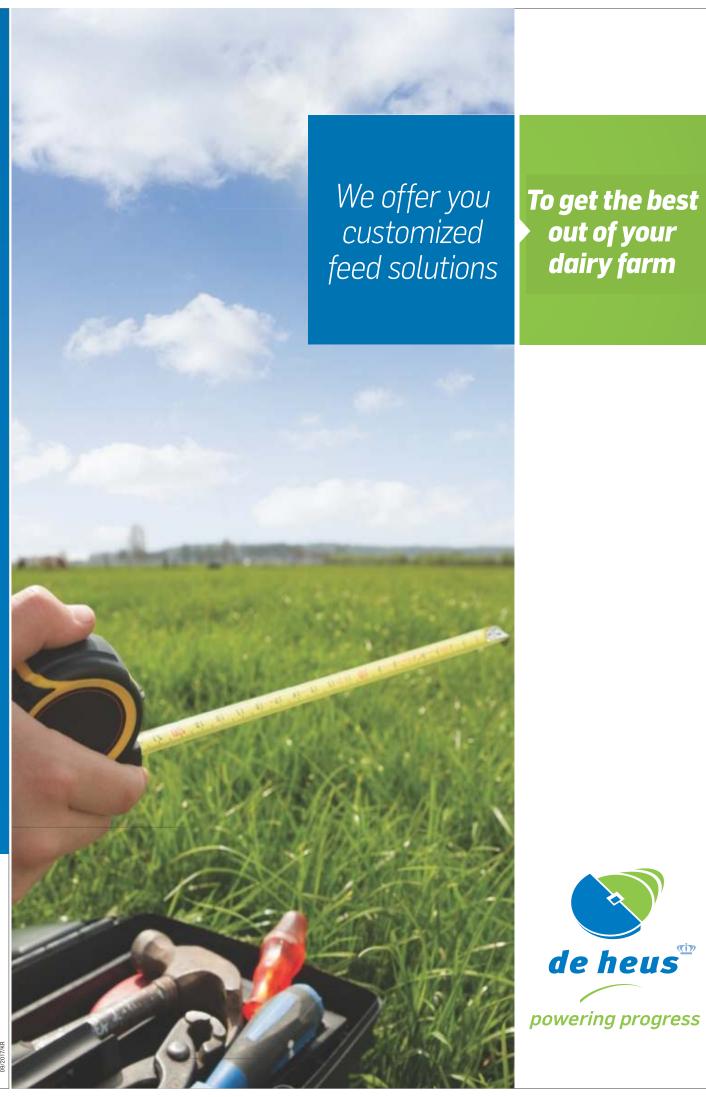


All our Animal Feed is produced and controlled according the strict De Heus (Dutch) quality standards.



Progress is in our genes

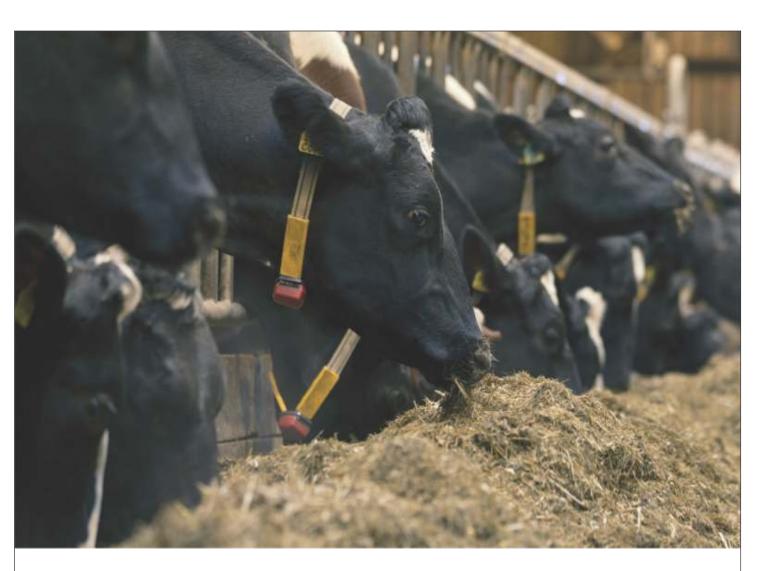






out of your

dairy farm



|SFOS: A UNIQUE INNOVATIVE CONCEPT

THE MAIN KEY TO CREATE EXTRA PROFIT FOR DAIRY FARMERS, IS TO MAKE MORE MILK OUT OF ROUGHAGE AND OUT OF A COWS LIFE. ALMOST 75% OF THE DIGESTION OF A COW CAN BE DONE IN THE RUMEN BY RUMEN MICROBES. ONLY IF THE MICROBES ARE FED CORRECTLY, WE CAN FULLY UTILIZE THE POWER OF THE RUMEN.

To do the work of digestion most efficiently, rumen microbes need, both rumen available energy and protein at the right time, of the right quantity and of the right quality. Based on the results of the analyzed quality of local roughages and the different ratios, our global nutritionists made a range of products fitting the local Indian needs. To help farmers to optimize the complex process in the rumen, De Heus developed a unique ration calculation system, called SynchroFos (SFOS). It is based on many years of practical and sci-

- entific experience. This SFOS system has proven its power in many countries all over the world. Working with the SFOS system in combination with our special developed feed formulas, being our Synchromix and SynchroLac productrange, expected results will be:
- ►Improved fertility;
- More milk out of roughage;
- ▶Better milk fat;
- ▶Better margin for farmers;
- ▶ More healthy cows;
- ► Higher durability of cows.

This range has been developed to correct basic rations based on various combinations of roughages like corn and different types of fresh grass, oats, berseem and straw. To utilize rumen bugs, these formulas do contain a well-balanced amount of good available rumen

energy and rumen protein fitting each specific situation. Beside this, a big advantage is also that all necessary minerals and vitamins are already added to these products. With our SFOS FeedSelector, our dairy specialists can calculate how much of what product will perform best in each specific situation.

		SPECIFICATIONS		GETTING THE BEST RESULTS WHEN BALANCING THE FOLLOWING ROUGHAGE COMBINATIONS	QUANTITY PER COW/DAY
		Crude Protein*	≥31	Wheat- or Rice straw or	3 - 4 kg
YELLOW	= W	Bypass protein	++++++	Corn silage or	3 - 4 kg
	5002 Spectrum Velia	Energy	+++++	Corn silage in combination with a little Green fodder	2.5 - 3.5 kg
	0	Rumen Energy	++++		
		Rumen Protein	++++++		
		SPECIFICATIONS		GETTING THE BEST RESULTS WHEN BALANCING THE FOLLOWING ROUGHAGE COMBINATIONS	QUANTITY PER COW/DAY
	E N	Crude Protein*	≥28	Corn silage (low starch) or Grain silage or	3 - 4 kg
		Bypass protein	+++++	Corn silage + Green fodder or	3 - 4 kg
	5006 Sections Boar	Energy	+++++	Fresh Corn or Green fodder (low protein) or	3 - 4 kg
BROWN	0	Rumen Energy	+++++	Corn silage + Berseem	2.5 - 3.5 kg
		Rumen Protein	+++++		
				GETTING THE BEST RESULTS WHEN BALANCING THE FOLLOWING ROUGHAGE COMBINATIONS	QUANTITY PER COW/DAY
	- N	Crude Protein*	≥22	Berseem (mature) or Rye grass (young) or	2 - 3 kg
	_ //	Bypass protein	+++++	Berseem (young) or Alfalfa (mature)	1 - 2 kg
	5010 Sections Over .	Energy	+++++	Corn silage + Alfalfa or	1 - 2.5 kg
GREEN	0	Rumen Energy	+++++	Alfalfa (young)	0-1 kg
		Rumen Protein	+++		

KALIBER PRODUCTS

An optimal calve- and heifer rearing does have a big

to use the gigantic genetic potential of the modern cow. Based on this research we developed a very famous impact on the productivity and efficiency of the future calve rearing program called Kaliber program. For all milking cow. De Heus has done a lot of research on how phases in the rearing period there are dedicated formulas.

	3 5	SPECIFICATIONS		FEEDING DIRECTIONS	QUANTITY PER CALVE/DAY
		Crude Protein*	≥22		
	7	Quality protein	+++++	From one week till at least 4 months	
0740750	S210 faller lime	Development	+++	Every day fresh feed	start with a little bit till around 2.5 to 3 kg
STARTER	0	Growth	+++++	Always fresh water available	
		Safety	++++++		
		SPECIFICATIONS		FEEDING DIRECTIONS	QUANTITY PER CALVE/DAY
		Crude Protein*	≥24		
		Quality protein	++++	From 4-6 months till 12 months	
	S312 Gille John	Development	+++	Every day fresh feed	2 kg to adlib depending on the given roughage quality
JUNIOR		Growth	+++++	Always fresh water available	
		Safety	+++++		
		SPECIFICATIONS		FEEDING DIRECTIONS	QUANTITY PER CALVE/DAY
	- P	Crude Protein*	≥29	From 12 months till calving	
		Quality protein	+++	Every day fresh feed	
	5316 talter femin'	Development	+++++	Always fresh water available	2 kg to adlib depending on the given roughage quality
SENIOR	0	Growth	++++	Due to its composition and well balanced minerals, also suitable	
		Safety	++++	to balance dry cow diets	

*Applicable on moisture free basis

SYNCHROLAC RANGE

This range will stimulate milk production during the different stages of lactation. Depending on the specific roughage quality, one of the Synchrolacs will fit best. For example, in grass rich diets more of the needed energy has to be supplied by starch while in

corn rich diets the energy also needs to originate from other sources. All formulas are additional with one of the Synchromixes. Due to the high energy content next to the added quality of minerals and vitamins a perfect production will be realized next to a positive contribution to fertility.

		SPECIFICATIONS		BEST COMBINATION WITH	QUANTITY PER COW/DAY	
TOP	= AL	Crude Protein*	≥21	Roughage with a decent amount of starch in	Best advice will be based on a calculation with the FeedSelector	
	5025	Bypass protein	+++++	For example good quality corn silage		
	Section from	Energy	+++++++			
		Bypass Energy	+++++			
		SPECIFICATIONS		BEST COMBINATION WITH	QUANTITY PER COW/DAY	
SUPER	= at	Crude Protein*	≥19	Roughage with a medium amount of starch in		
	Bypass protein	++++	For example fresh corn or sorghum	Best advice will be based on		
	Section Saw	Energy	++++++		a calculation with the FeedSelector	
		Bypass Energy	+++++			
	SPECIFIC			BEST COMBINATION WITH	QUANTITY PER COW/DAY	
		Crude Protein*	≥17	Roughage without starch in		
	5030	Bypass protein	++++	For example green fodder	Best advice will be based on	
POWER	0	Energy	+++++		a calculation with the FeedSelector	
		Rynass Energy				

PRELACTO PRO DEDICATED COMPOUND FEED FOR DRY COWS

BENEFITS

- ▶ Easy calving and healthy start of lactation
- ► Fit cows during dry period

- ▶ Higher profit
- ▶ Better fertility

SPECIFICATIONS		FEEDING DIRECTION	QUANTITY Per Cow/day
Crude Protein	≥230g/Kg.		3-4 Kg per cow/day along with 3-4 Kg wheat straw and fodder
Crude Fibre	≥ 110g/Kg.	50 Days prior to Calving	
Magnesium	₫.5g/Kg.		
Vitamin A	≥ 35.000IU/Kg.		



MODE OF ACTION

To minimize nutritional stress in this important period, we advise to feed a stabilized diet during the whole dry period. Our ideal Prelacto diet is mainly based on corn silage and wheat straw, being the important and stable used roughages in Indian dry cow diets. To balance these diets, extra good protein is needed to maintain the rumen function. Next to this protein, special minerals and vitamins are added to the Prelacto Pro to create the best possible preparation for a healthy calving period and an optimal start on the new lactation period.